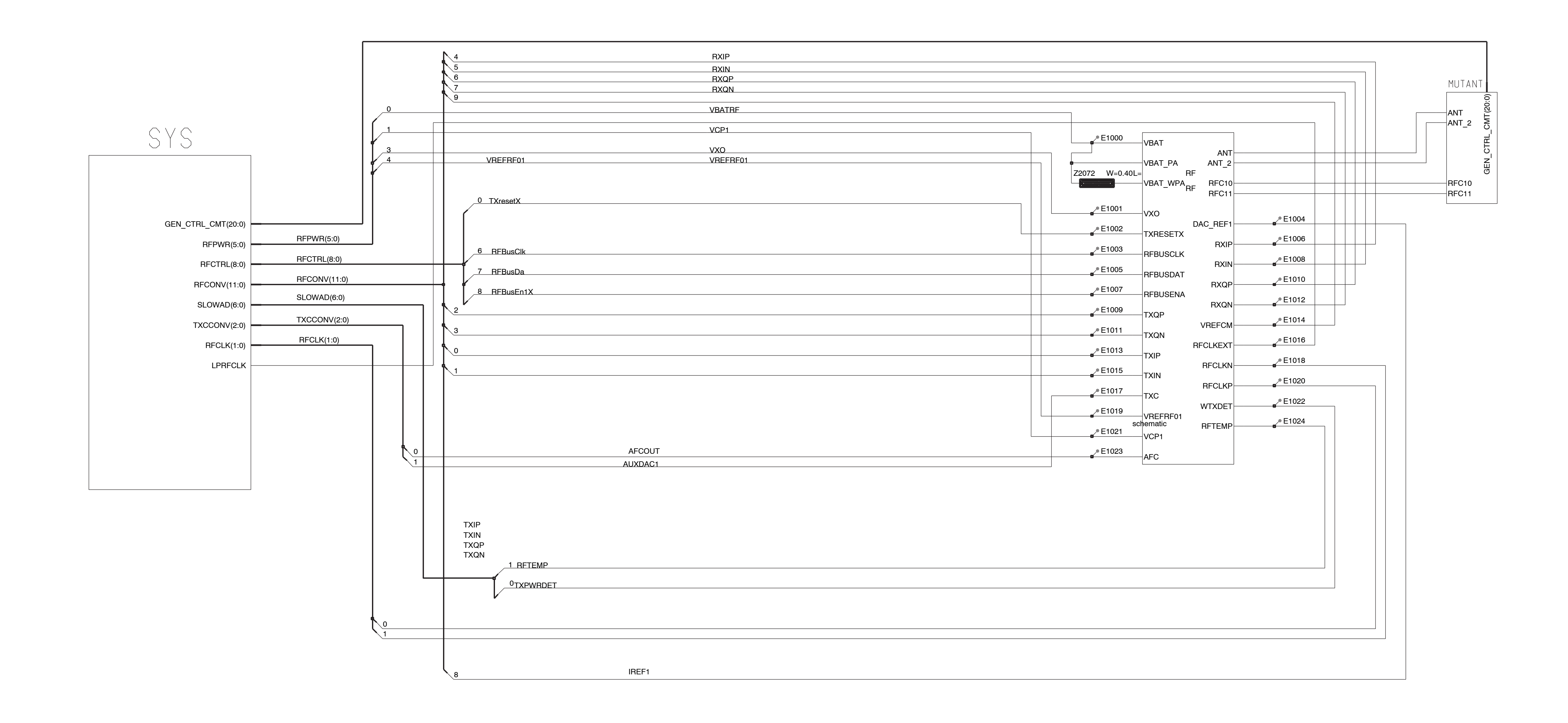
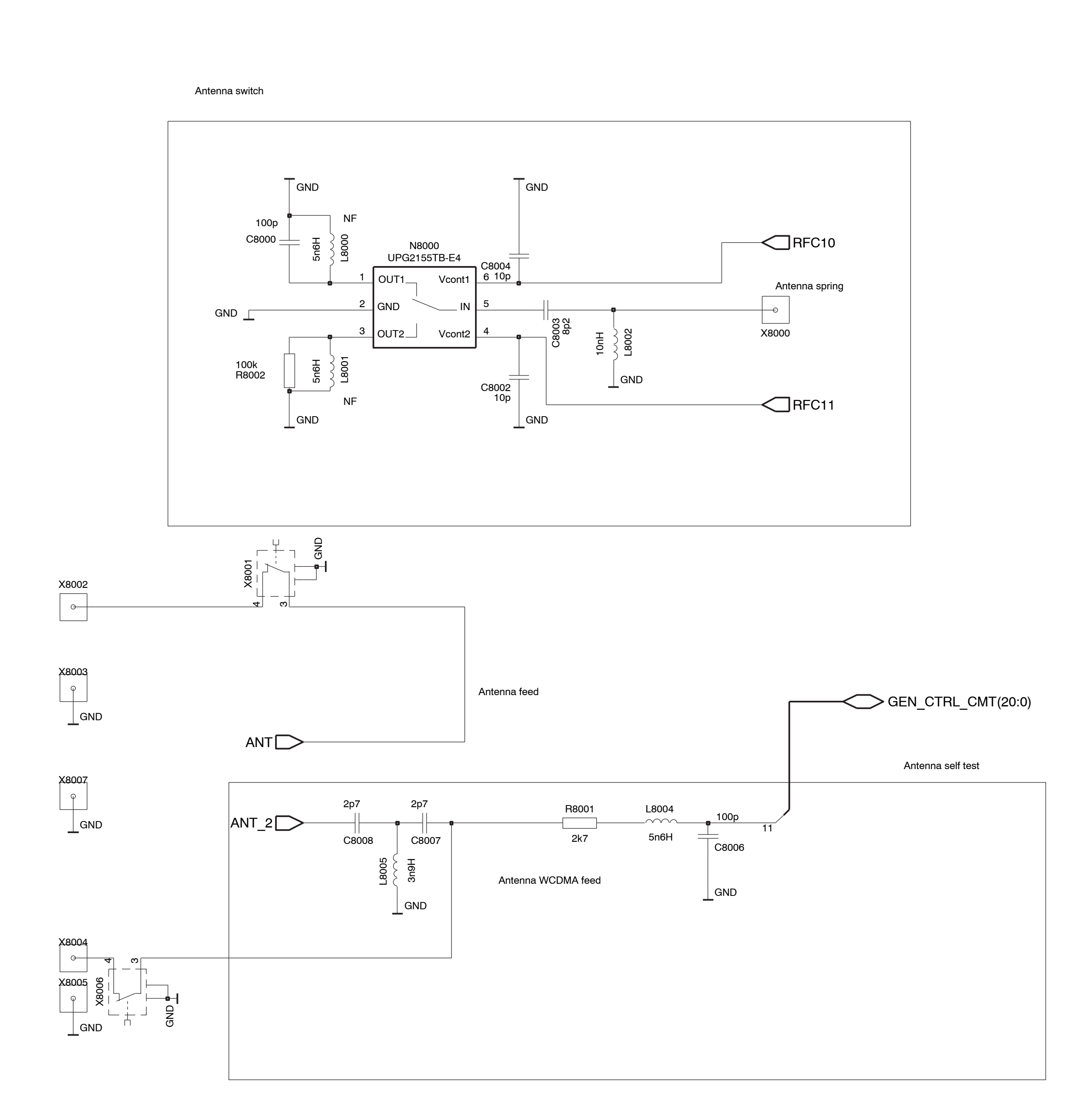


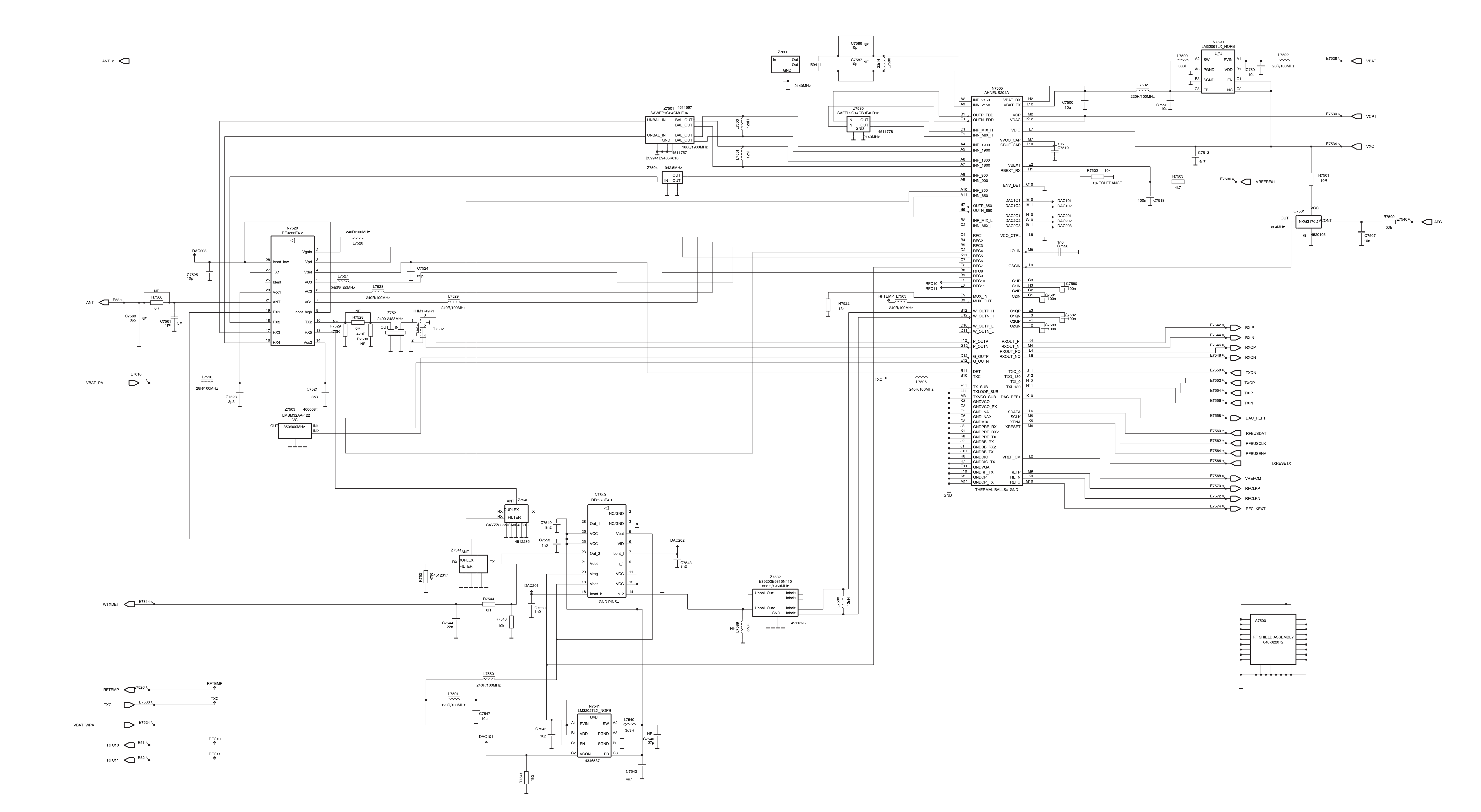
CMT SHEET NAME	REF AREA
/sys/cmt_if/prod_test_pattern	2060-2069
/sys/cmt_if/battery_conn	2070-2099
/sys/cmt_if/audio	2000-2029
/sys/cmt_if/audio	2100-2199
/sys/cmt_if/itu	2400-2499
/sys/cmt_if/camera	2500-2599
/sys/cmt_if/sim	2700-2799
/sys/cmt_if/emu_rap	3100-3120
/sys/cmt_if/wing	4000-4099
/sys/cmt_if/lid	3800-3899
/sys/cmt_if/bt	6000-6099
/sys/cmt_if/wlan	6300-6510
/sys/cmt_if/conn/charger-USB	2030-2039

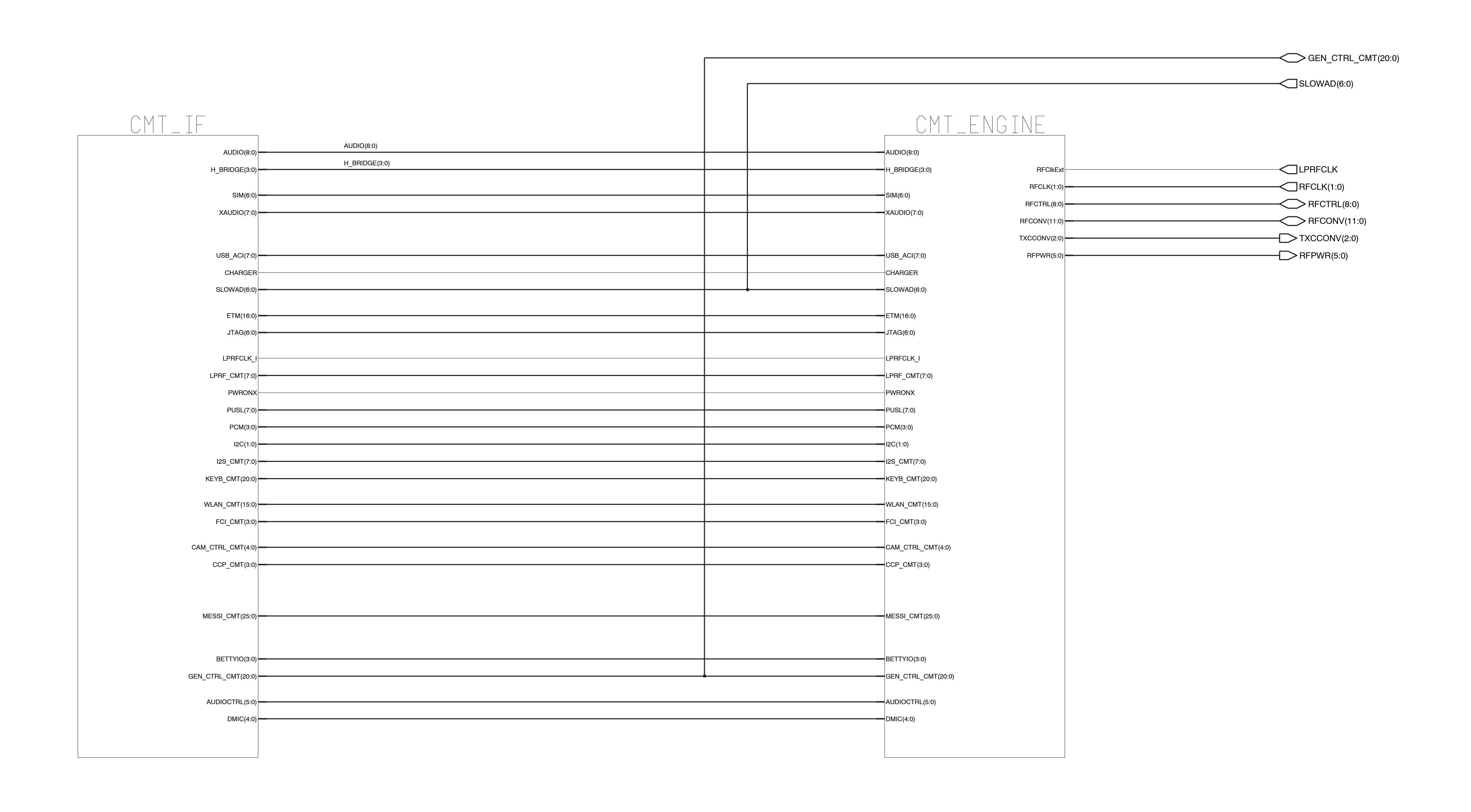
CMT SHEET NAME	REF AREA
/sys/cmt_engine/power/vilma	2200-2299
/sys/cmt_engine/power/betty	2300-2389
/sys/cmt_engine/power/coreps	2390-2399
/sys/cmt_engine/digi/rapido	2800-2849
/sys/cmt_engine/digi/geniomux	2850-2899
/sys/cmt_engine/digi/mem_cmt/combo	3000-3099
/sys/cmt_engine/digi/mem_cmt/mass_memory	3200-3299

RF SHEET NAME	REF AREA
/RF	7500-7599
/MUTANT	8000-8010



Antenna switch
GND
NF
100p
C8000
5n6H
L8000
N8000
UPG2155TB-E4
OUT1
Vcont1
GND
IN
OUT2
Vcont2
C8004
10p
RFC10
Antenna spring
X8000
C8003
8p2
10nH
L8002
100k
R8002
L8001
C8002
10p
RFC11
X8001
X8002
X8003
X8007
Antenna feed
ANT
GEN_CTRL_CMT(20:0)
Antenna self test
ANT_2
2p7
C8008
C8007
R8001
2k7
L8004
5n6H
100p
C8006
L8005
3n9H
Antenna WCDMA feed
X8004
X8005
X8006


N7505
AHNEUS204A
N7520
RF9283E4.2
N7540
RF3278E4.1
N7541
LM3202TLX_NOPB
N7590
LM3206TLX_NOPB
A7500
RF SHIELD ASSEMBLY
040-022072



CMT_IF
CMT_ENGINE
GEN_CTRL_CMT(20:0)
SLOWAD(6:0)
AUDIO(8:0)
H_BRIDGE(3:0)
SIM(6:0)
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
SLOWAD(6:0)
ETM(16:0)
JTAG(6:0)
LPRFCLK_I
LPRF_CMT(7:0)
PWRONX
PUSL(7:0)
PCM(3:0)
I2C(1:0)
I2S_CMT(7:0)
KEYB_CMT(20:0)
WLAN_CMT(15:0)
FCI_CMT(3:0)
CAM_CTRL_CMT(4:0)
CCP_CMT(3:0)
MESSI_CMT(25:0)
BETTYIO(3:0)
GEN_CTRL_CMT(20:0)
AUDIOCTRL(5:0)
DMIC(4:0)
RFClkExt
RFCLK(1:0)
RFCTRL(8:0)
RFCONV(11:0)
TXCCONV(2:0)
RFPWR(5:0)
LPRFCLK
RFCLK(1:0)
RFCTRL(8:0)
RFCONV(11:0)
TXCCONV(2:0)
RFPWR(5:0)

SLOWAD(6:0)

LPRFCLK_I

TXC_CONV_I(2:0)

POWER

DIGI

basic

RF_BB

schematic

NO GPS in Bruce

AUDIO(8:0)
H_BRIDGE(3:0)
SIM(6:0)
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
BETTYIO(3:0)
SLOWAD(6:0)

TXC_CONV(2:0)
DIG_AUDIO(5:0)
EMINT(1:0)
ACI(1:0)
TXC(2:0)
INT_SIM(2:0)
CBUS(3:0)
PUSL(7:0)
FCI_CMT(3:0)
INTUSB(8:0)
PWRONX

2200-2399

DIG_AUDIO(5:0)
EMINT(1:0)
ACI(1:0)
TXC(2:0)
INT_SIM(2:0)
CBUS(3:0)
PUSL(7:0)
I2C(1:0)
FCI_CMT(3:0)
PCM(3:0)
JTAG(6:0)
ETM(16:0)
KEYB_CMT(20:0)
WLAN_CMT(15:0)
AUDIOCTRL(5:0)

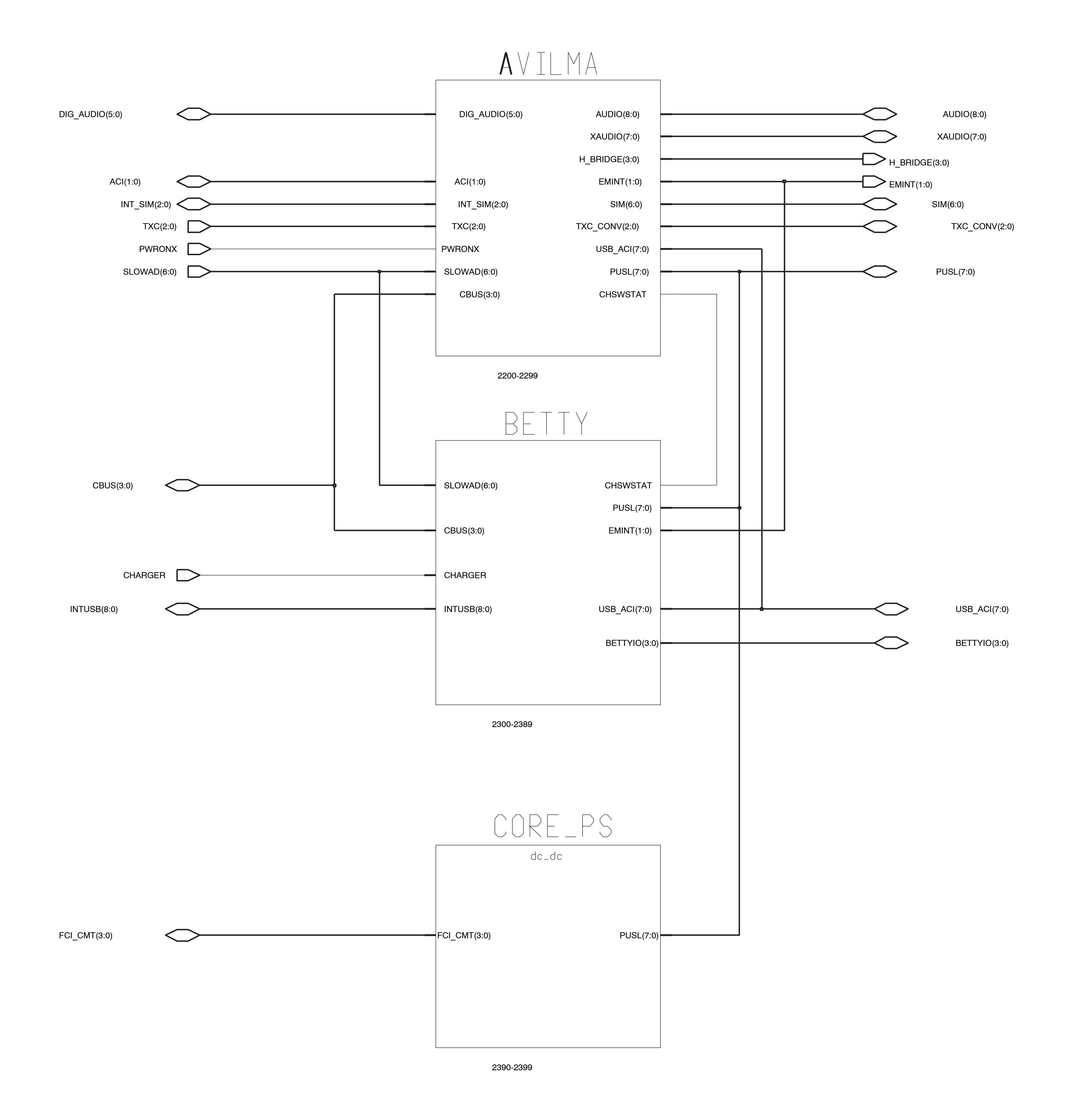
RFCLK_I(1:0)
RFCTRL_I(8:0)
RFCONV_I(11:0)
LPRF_CMT(7:0)
CAM_CTRL_CMT(4:0)
CCP_CMT(3:0)
DMIC(4:0)
I2S_CMT(7:0)
GEN_CTRL_CMT(20:0)
MESSI_CMT(25:0)
INTUSB(8:0)

LPRFCLK_I
TXCCONV_I(2:0)
RFCLK_I(1:0)
RFCTRL_I(8:0)
RFCONV_I(11:0)

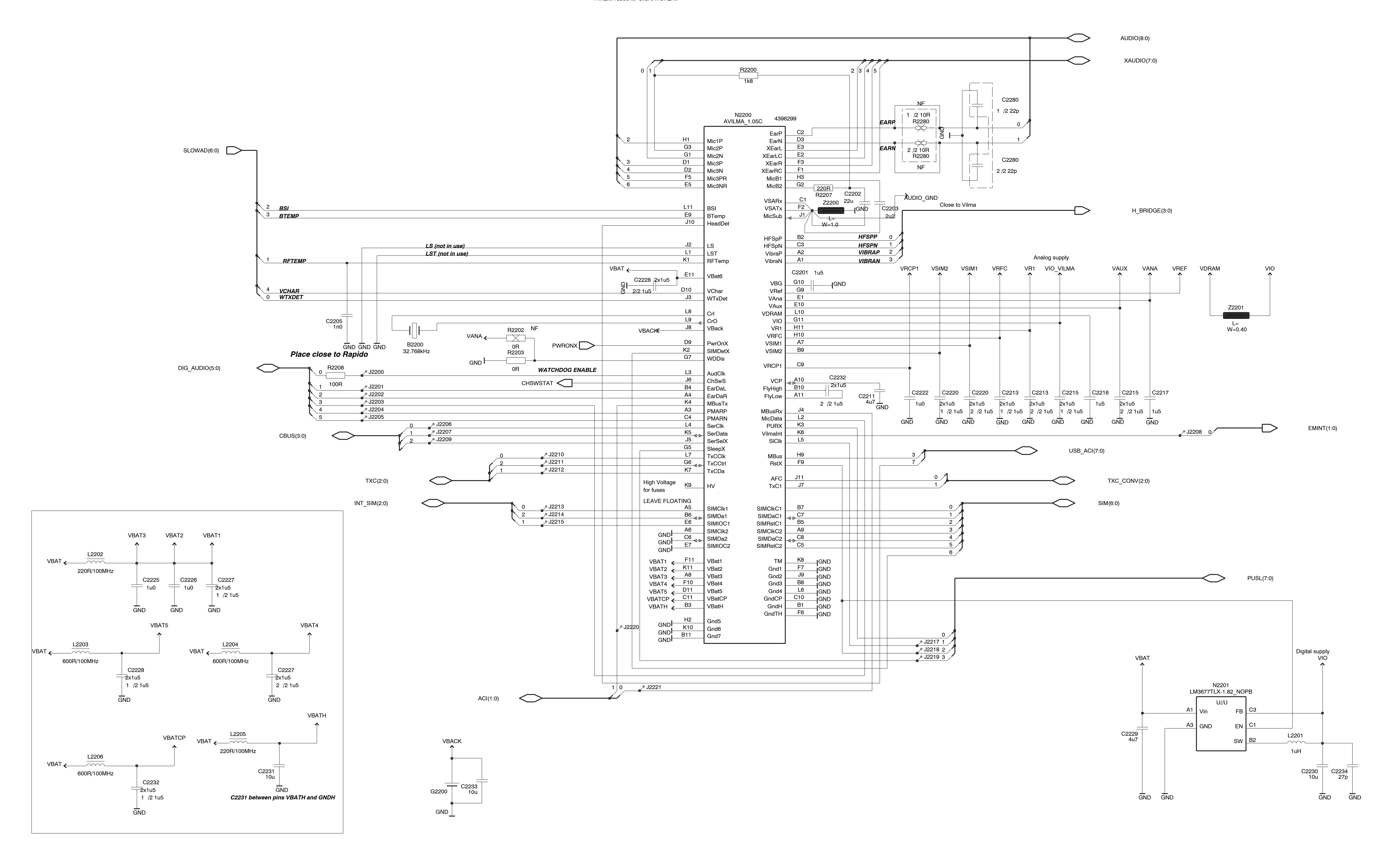
RFClkExt
RFCLK(1:0)
RFCTRL(8:0)
RFCONV(11:0)
TXCCONV(2:0)
RFPWR(5:0)

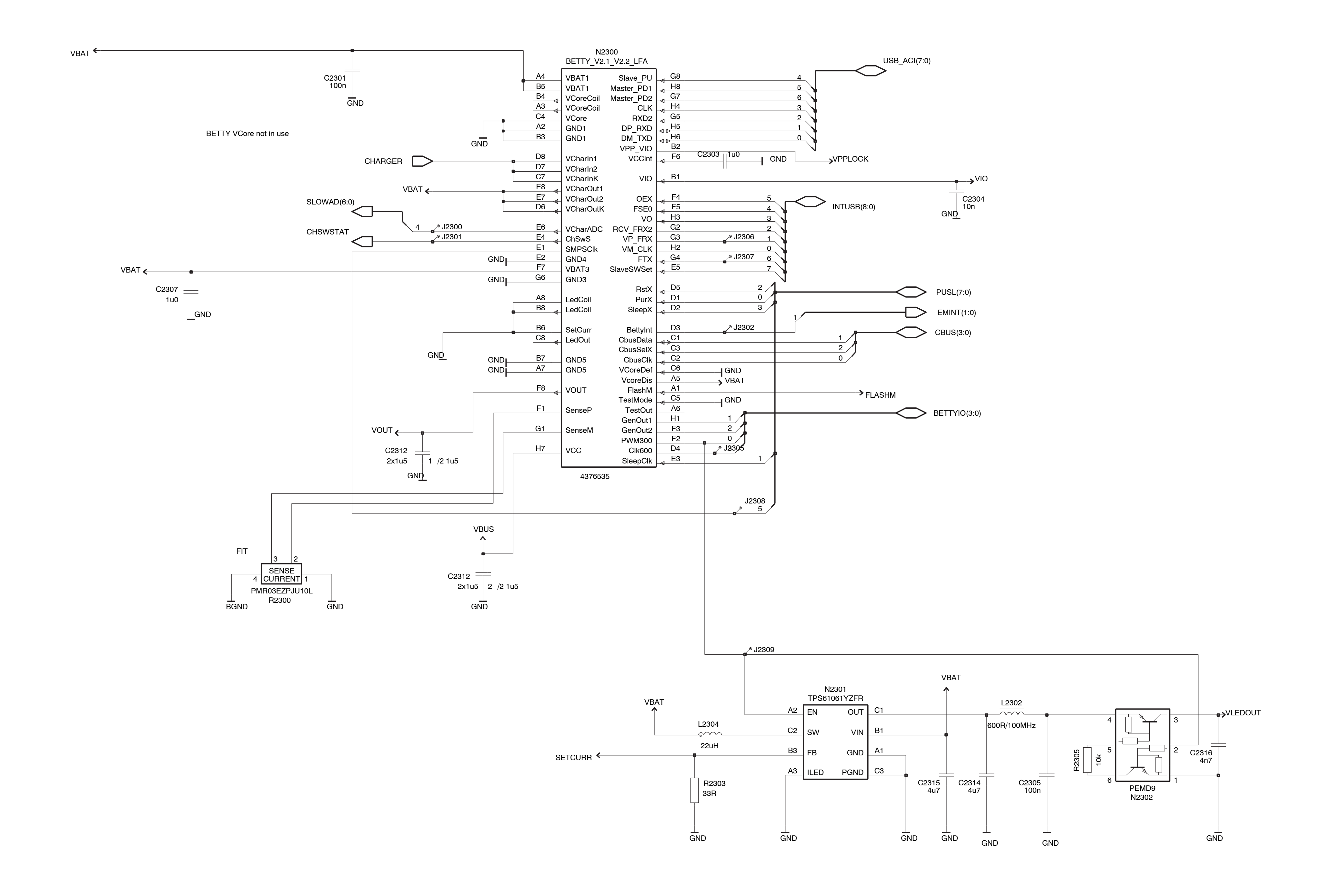
LPRFCLK_I
AUDIO(8:0)
H_BRIDGE(3:0)
SIM(6:0)
XAUDIO(7:0)
USB_ACI(7:0)
CHARGER
BETTYIO(3:0)
PWRONX
I2C(1:0)
PCM(3:0)
KEYB_CMT(20:0)
WLAN_CMT(15:0)
AUDIOCTRL(5:0)

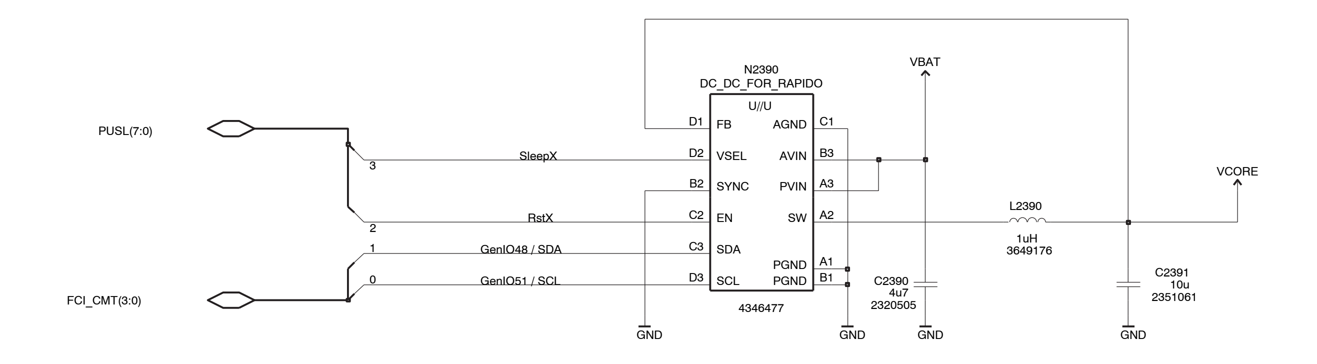
RFClkExt
RFCLK(1:0)
RFCTRL(8:0)
RFCONV(11:0)
TXCCONV(2:0)
RFPWR(5:0)
LPRF_CMT(7:0)
CAM_CTRL_CMT(4:0)
CCP_CMT(3:0)
DMIC(4:0)
I2S_CMT(7:0)
GEN_CTRL_CMT(20:0)
MESSI_CMT(25:0)
FCI_CMT(3:0)
ETM(16:0)
JTAG(6:0)
PUSL(7:0)


AVILMA
DIG_AUDIO(5:0)
ACI(1:0)
INT_SIM(2:0)
TXC(2:0)
PWRONX
SLOWAD(6:0)
CBUS(3:0)
AUDIO(8:0)
XAUDIO(7:0)
H_BRIDGE(3:0)
EMINT(1:0)
SIM(6:0)
TXC_CONV(2:0)
USB_ACI(7:0)
PUSL(7:0)
CHSWSTAT
2200-2299
BETTY
CHARGER
INTUSB(8:0)
BETTYIO(3:0)
2300-2389
CORE_PS
dc_dc
FCI_CMT(3:0)
2390-2399

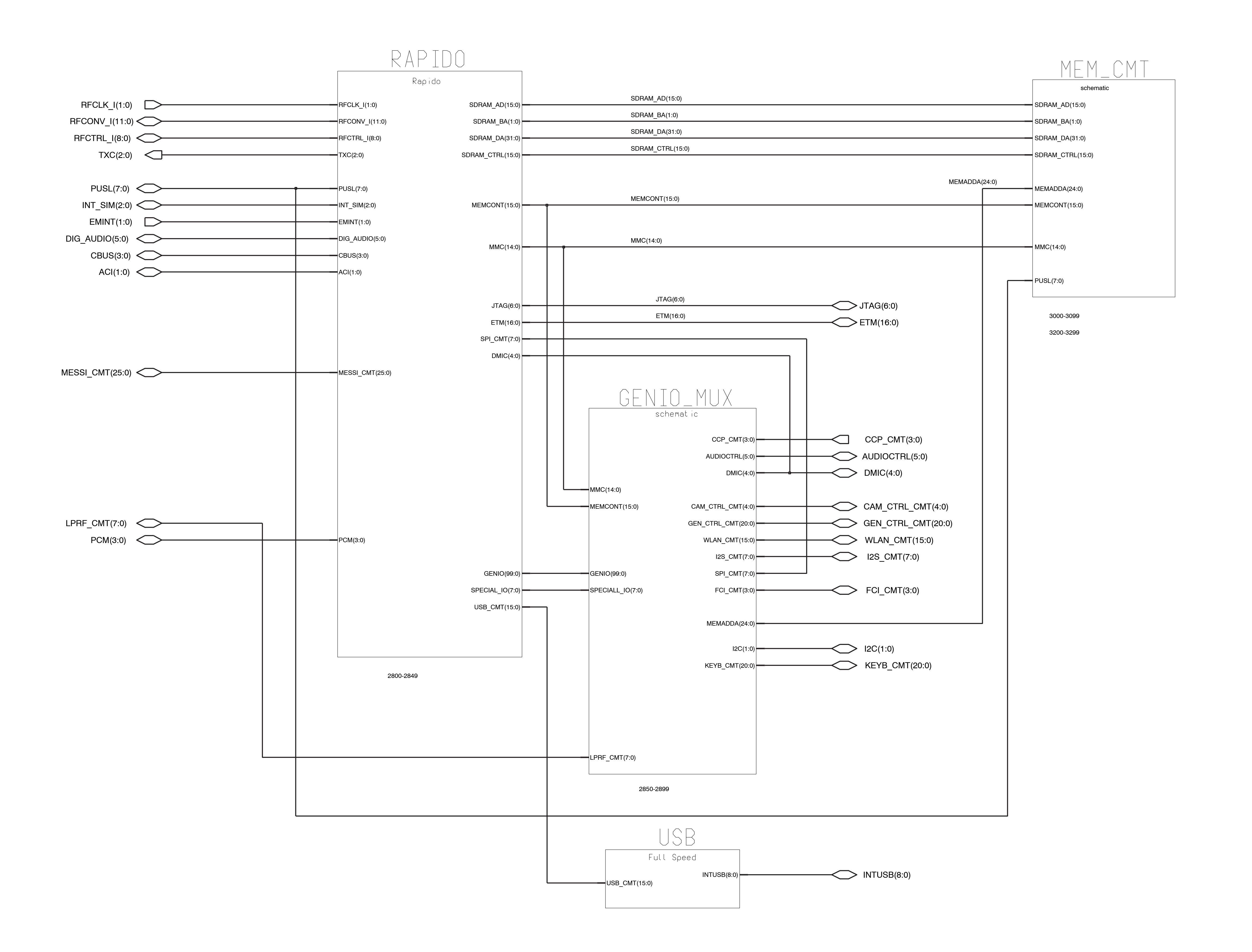
AVILMA used for SIGNATURE !!!



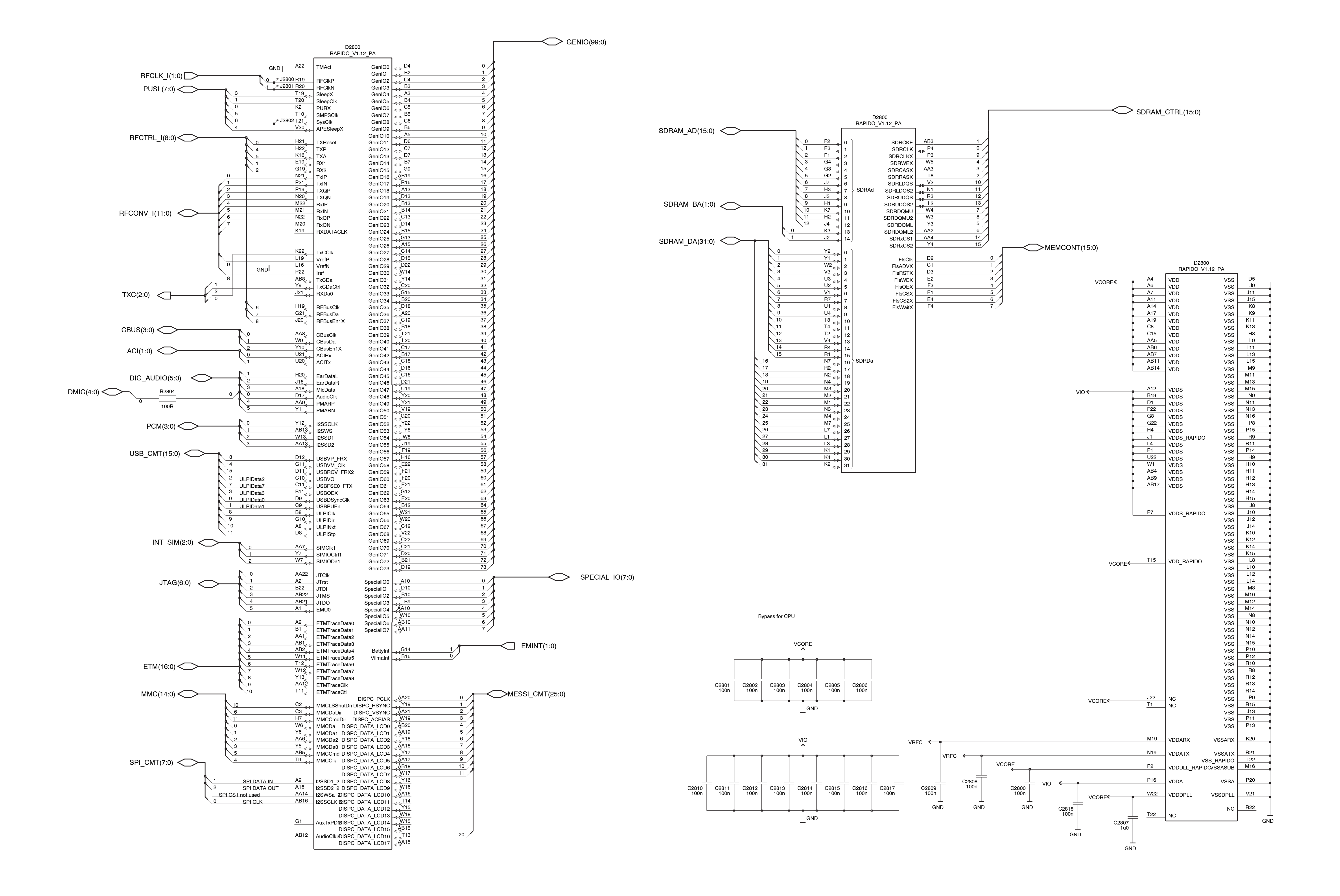

N2300
BETTY_V2.1_V2.2_LFA
4376535
VBAT
C2301
100n
GND
BETTY VCore not in use
CHARGER
SLOWAD(6:0)
CHSWSTAT
J2300
J2301
C2307
1u0
VBAT1
VCoreCoil
VCore
GND1
VCharIn1
VCharIn2
VCharInK
VCharOut1
VCharOut2
VCharOutK
VCharADC
ChSwS
SMPSClk
GND4
VBAT3
GND3
LedCoil
SetCurr
LedOut
GND5
VOUT
SenseP
SenseM
VCC
Slave_PU
Master_PD1
Master_PD2
CLK
RXD2
DP_RXD
DM_TXD
VPP_VIO
VCCint
VIO
OEX
FSE0
VO
RCV_FRX2
VP_FRX
VM_CLK
FTX
SlaveSWSet
RstX
PurX
SleepX
BettyInt
CbusData
CbusSelX
CbusClk
VCoreDef
VcoreDis
FlashM
TestMode
TestOut
GenOut1
GenOut2
PWM300
Clk600
SleepClk
USB_ACI(7:0)
C2303
1u0
VPPLOCK
VIO
C2304
10n
INTUSB(8:0)
J2306
J2307
PUSL(7:0)
EMINT(1:0)
CBUS(3:0)
J2302
FLASHM
BETTYIO(3:0)
J2305
J2308
VOUT
C2312
2x1u5
1 /2 1u5
FIT
SENSE CURRENT
PMR03EZPJU10L
R2300
BGND
VBUS
2 /2 1u5
J2309
N2301
TPS61061YZFR
EN
SW
FB
ILED
OUT
VIN
PGND
L2304
22uH
SETCURR
R2303
33R
C2315
4u7
C2314
4u7
L2302
600R/100MHz
C2305
100n
R2305
10k
PEMD9
N2302
C2316
4n7
VLEDOUT



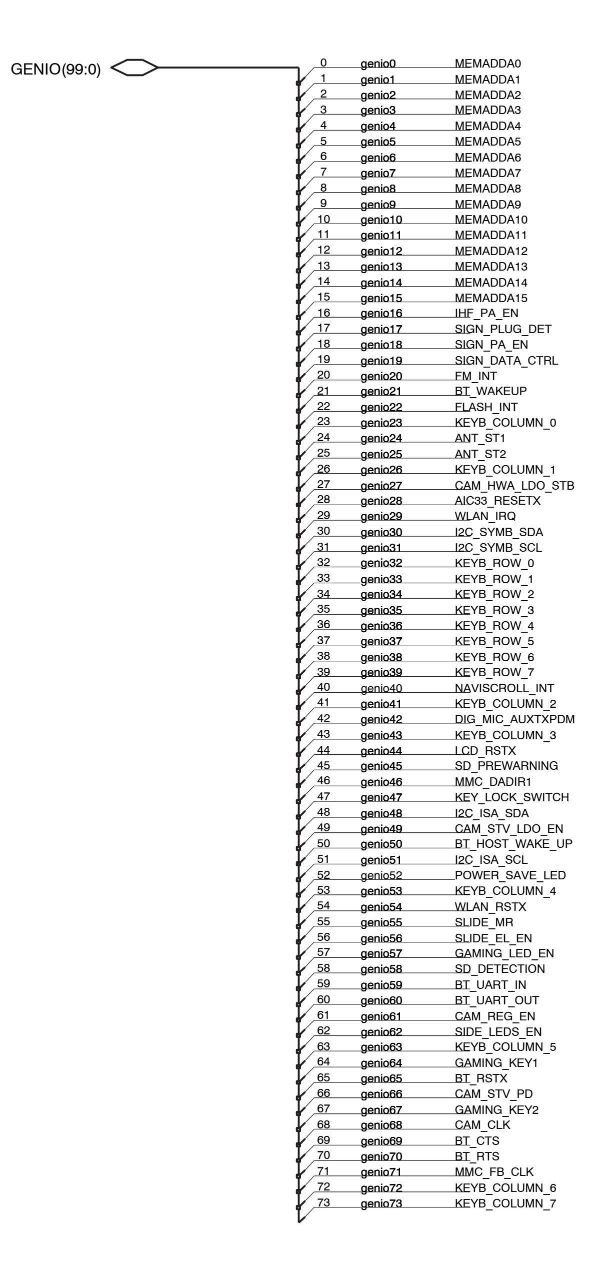
PUSL(7:0)
FCI_CMT(3:0)
3
2
1
0
SleepX
RstX
GenIO48 / SDA
GenIO51 / SCL
N2390
DC_DC_FOR_RAPIDO
U//U
D1
FB
D2
VSEL
B2
SYNC
C2
EN
C3
SDA
D3
SCL
AGND
C1
AVIN
B3
PVIN
A3
SW
A2
PGND
A1
PGND
B1
4346477
VBAT
C2390
4u7
2320505
L2390
1uH
3649176
C2391
10u
2351061
VCORE
GND
GND
GND
GND



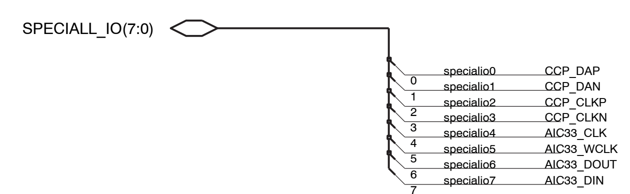
RAPIDO
Rapido
RFCLK_I(1:0)
RFCONV_I(11:0)
RFCTRL_I(8:0)
TXC(2:0)
PUSL(7:0)
INT_SIM(2:0)
EMINT(1:0)
DIG_AUDIO(5:0)
CBUS(3:0)
ACI(1:0)
MESSI_CMT(25:0)
LPRF_CMT(7:0)
PCM(3:0)
SDRAM_AD(15:0)
SDRAM_BA(1:0)
SDRAM_DA(31:0)
SDRAM_CTRL(15:0)
MEMCONT(15:0)
MMC(14:0)
JTAG(6:0)
ETM(16:0)
SPI_CMT(7:0)
DMIC(4:0)
GENIO(99:0)
SPECIAL_IO(7:0)
USB_CMT(15:0)
2800-2849
MEM_CMT
schematic
MEMADDA(24:0)
PUSL(7:0)
3000-3099
3200-3299
GENIO_MUX
schematic
CCP_CMT(3:0)
AUDIOCTRL(5:0)
DMIC(4:0)
MMC(14:0)
MEMCONT(15:0)
CAM_CTRL_CMT(4:0)
GEN_CTRL_CMT(20:0)
WLAN_CMT(15:0)
I2S_CMT(7:0)
SPI_CMT(7:0)
GENIO(99:0)
SPECIALL_IO(7:0)
FCI_CMT(3:0)
MEMADDA(24:0)
I2C(1:0)
KEYB_CMT(20:0)
LPRF_CMT(7:0)
2850-2899
USB
Full Speed
USB_CMT(15:0)
INTUSB(8:0)



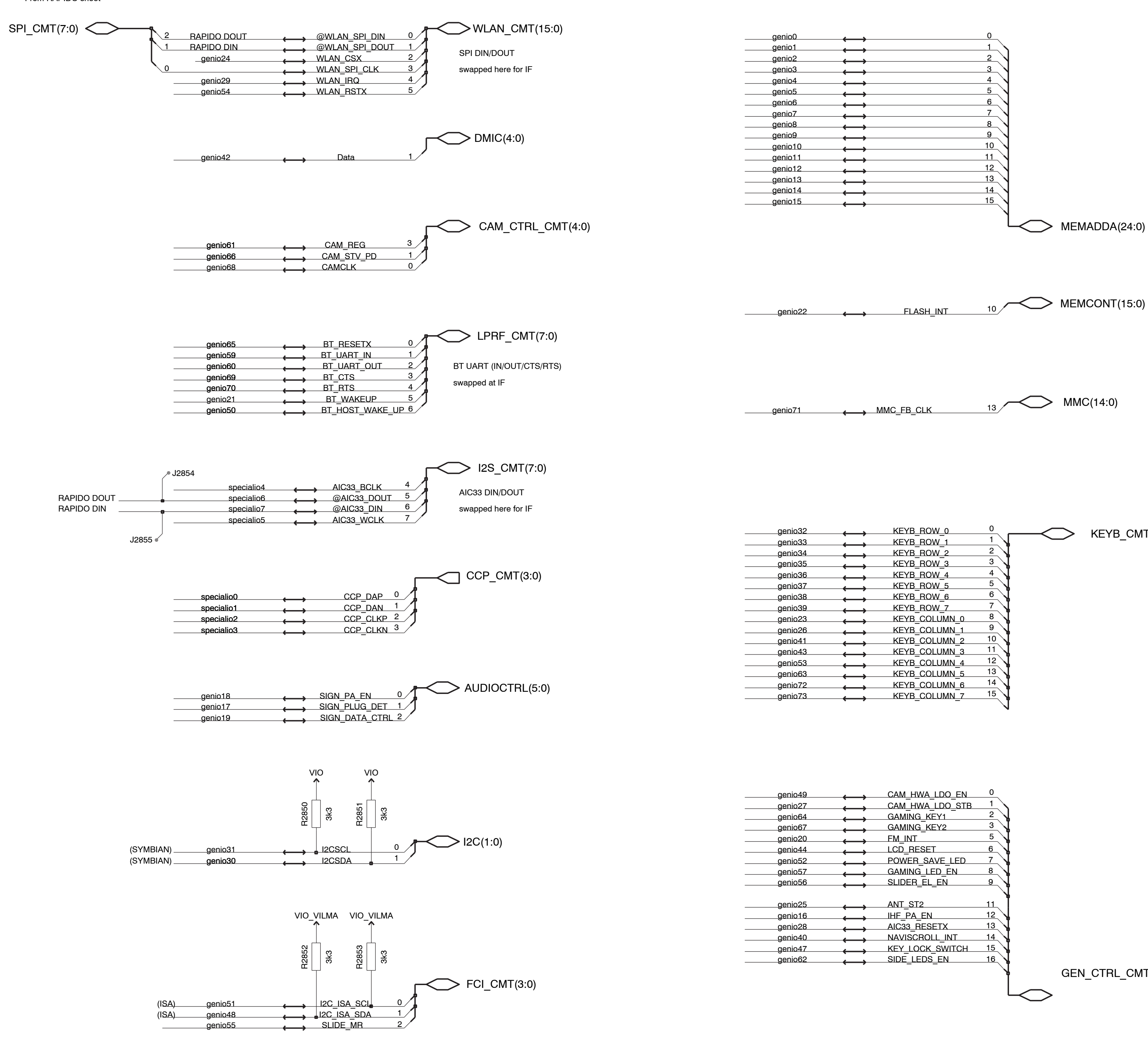
D2800
RAPIDO_V1.12_PA
GENIO(99:0)
RFCLK_I(1:0)
PUSL(7:0)
RFCTRL_I(8:0)
RFCONV_I(11:0)
TXC(2:0)
CBUS(3:0)
ACI(1:0)
DIG_AUDIO(5:0)
DMIC(4:0)
PCM(3:0)
USB_CMT(15:0)
INT_SIM(2:0)
JTAG(6:0)
ETM(16:0)
MMC(14:0)
SPI_CMT(7:0)
SPECIAL_IO(7:0)
EMINT(1:0)
MESSI_CMT(25:0)
SDRAM_AD(15:0)
SDRAM_BA(1:0)
SDRAM_DA(31:0)
SDRAM_CTRL(15:0)
MEMCONT(15:0)
Bypass for CPU
VCORE
VIO
VRFC
GND



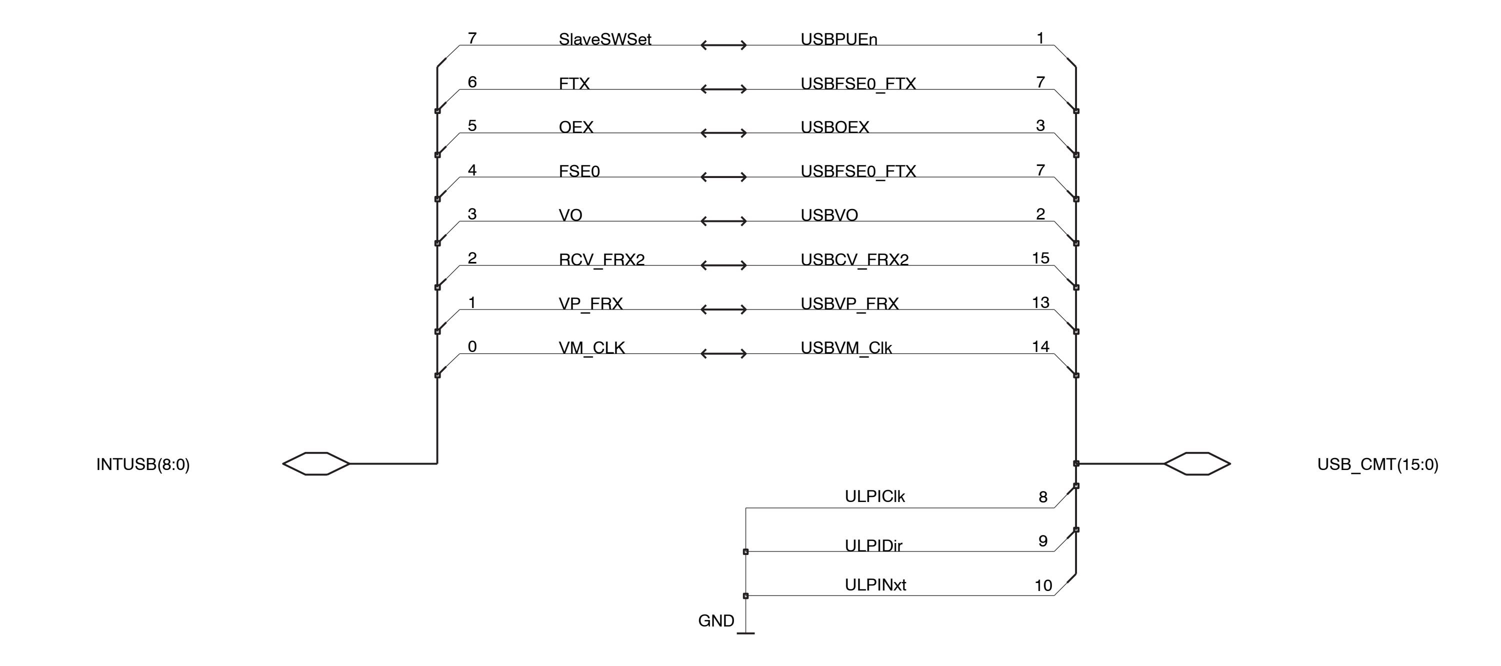
GENIO(99:0)
0 genio0 MEMADDA0
1 genio1 MEMADDA1
2 genio2 MEMADDA2
3 genio3 MEMADDA3
4 genio4 MEMADDA4
5 genio5 MEMADDA5
6 genio6 MEMADDA6
7 genio7 MEMADDA7
8 genio8 MEMADDA8
9 genio9 MEMADDA9
10 genio10 MEMADDA10
11 genio11 MEMADDA11
12 genio12 MEMADDA12
13 genio13 MEMADDA13
14 genio14 MEMADDA14
15 genio15 MEMADDA15
16 genio16 IHF_PA_EN
17 genio17 SIGN_PLUG_DET
18 genio18 SIGN_PA_EN
19 genio19 SIGN_DATA_CTRL
20 genio20 FM_INT
21 genio21 BT_WAKEUP
22 genio22 FLASH_INT
23 genio23 KEYB_COLUMN_0
24 genio24 ANT_ST1
25 genio25 ANT_ST2
26 genio26 KEYB_COLUMN_1
27 genio27 CAM_HWA_LDO_STB
28 genio28 AIC33_RESETX
29 genio29 WLAN_IRQ
30 genio30 I2C_SYMB_SDA
31 genio31 I2C_SYMB_SCL
32 genio32 KEYB_ROW_0
33 genio33 KEYB_ROW_1
34 genio34 KEYB_ROW_2
35 genio35 KEYB_ROW_3
36 genio36 KEYB_ROW_4
37 genio37 KEYB_ROW_5
38 genio38 KEYB_ROW_6
39 genio39 KEYB_ROW_7
40 genio40 NAVISCROLL_INT
41 genio41 KEYB_COLUMN_2
42 genio42 DIG_MIC_AUXTXPDM
43 genio43 KEYB_COLUMN_3
44 genio44 LCD_RSTX
45 genio45 SD_PREWARNING
46 genio46 MMC_DADIR1
47 genio47 KEY_LOCK_SWITCH
48 genio48 I2C_ISA_SDA
49 genio49 CAM_STV_LDO_EN
50 genio50 BT_HOST_WAKE_UP
51 genio51 I2C_ISA_SCL
52 genio52 POWER_SAVE_LED
53 genio53 KEYB_COLUMN_4
54 genio54 WLAN_RSTX
55 genio55 SLIDE_MR
56 genio56 SLIDE_EL_EN
57 genio57 GAMING_LED_EN
58 genio58 SD_DETECTION
59 genio59 BT_UART_IN
60 genio60 BT_UART_OUT
61 genio61 CAM_REG_EN
62 genio62 SIDE_LEDS_EN
63 genio63 KEYB_COLUMN_5
64 genio64 GAMING_KEY1
65 genio65 BT_RSTX
66 genio66 CAM_STV_PD
67 genio67 GAMING_KEY2
68 genio68 CAM_CLK
69 genio69 BT_CTS
70 genio70 BT_RTS
71 genio71 MMC_FB_CLK
72 genio72 KEYB_COLUMN_6
73 genio73 KEYB_COLUMN_7



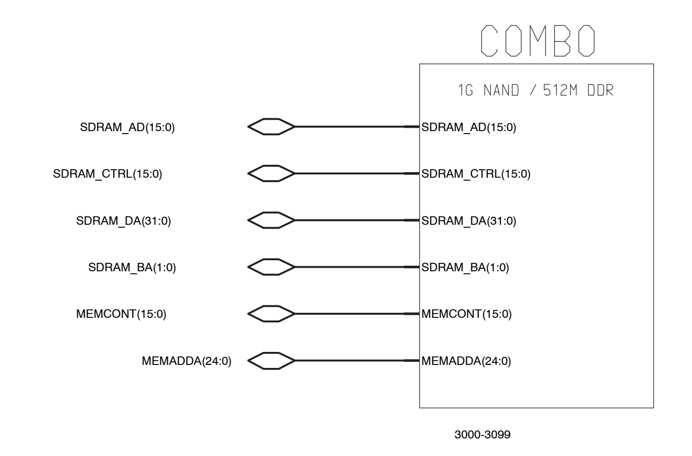
SPECIALL_IO(7:0)
0 specialio0 CCP_DAP
1 specialio1 CCP_DAN
2 specialio2 CCP_CLKP
3 specialio3 CCP_CLKN
4 specialio4 AIC33_CLK
5 specialio5 AIC33_WCLK
6 specialio6 AIC33_DOUT
7 specialio7 AIC33_DIN

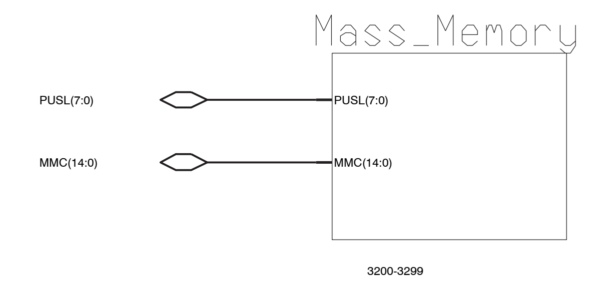


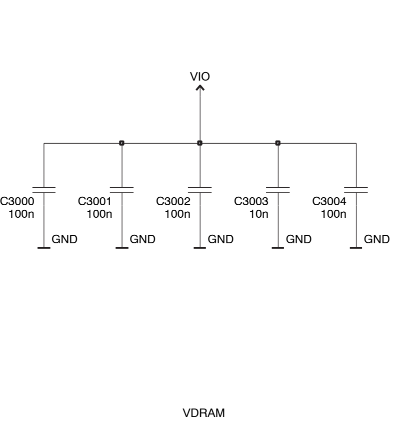
From RAPIDO sheet
SPI_CMT(7:0)
2 RAPIDO DOUT @WLAN_SPI_DIN 0
1 RAPIDO DIN @WLAN_SPI_DOUT 1
genio24 WLAN_CSX 2
0 WLAN_SPI_CLK 3
genio29 WLAN_IRQ 4
genio54 WLAN_RSTX 5
WLAN_CMT(15:0)
SPI DIN/DOUT
swapped here for IF
genio42 Data 1
DMIC(4:0)
genio61 CAM_REG 3
genio66 CAM_STV_PD 1
genio68 CAMCLK 0
CAM_CTRL_CMT(4:0)
genio65 BT_RESETX 0
genio59 BT_UART_IN 1
genio60 BT_UART_OUT 2
genio69 BT_CTS 3
genio70 BT_RTS 4
genio21 BT_WAKEUP 5
genio50 BT_HOST_WAKE_UP 6
LPRF_CMT(7:0)
BT UART (IN/OUT/CTS/RTS)
swapped at IF
J2854
RAPIDO DOUT
RAPIDO DIN
J2855
specialio4 AIC33_BCLK 4
specialio6 @AIC33_DOUT 5
specialio7 @AIC33_DIN 6
specialio5 AIC33_WCLK 7
I2S_CMT(7:0)
AIC33 DIN/DOUT
swapped here for IF
specialio0 CCP_DAP 0
specialio1 CCP_DAN 1
specialio2 CCP_CLKP 2
specialio3 CCP_CLKN 3
CCP_CMT(3:0)
genio18 SIGN_PA_EN 0
genio17 SIGN_PLUG_DET 1
genio19 SIGN_DATA_CTRL 2
AUDIOCTRL(5:0)
VIO
VIO
R2850 3k3
R2851 3k3
(SYMBIAN) genio31 I2CSCL 0
(SYMBIAN) genio30 I2CSDA 1
I2C(1:0)
VIO_VILMA
VIO_VILMA
R2852 3k3
R2853 3k3
(ISA) genio51 I2C_ISA_SCL 0
(ISA) genio48 I2C_ISA_SDA 1
genio55 SLIDE_MR 2
FCI_CMT(3:0)
genio0 0
genio1 1
genio2 2
genio3 3
genio4 4
genio5 5
genio6 6
genio7 7
genio8 8
genio9 9
genio10 10
genio11 11
genio12 12
genio13 13
genio14 14
genio15 15
MEMADDA(24:0)
genio22 FLASH_INT 10
MEMCONT(15:0)
genio71 MMC_FB_CLK 13
MMC(14:0)
genio32 KEYB_ROW_0 0
genio33 KEYB_ROW_1 1
genio34 KEYB_ROW_2 2
genio35 KEYB_ROW_3 3
genio36 KEYB_ROW_4 4
genio37 KEYB_ROW_5 5
genio38 KEYB_ROW_6 6
genio39 KEYB_ROW_7 7
genio23 KEYB_COLUMN_0 8
genio26 KEYB_COLUMN_1 9
genio41 KEYB_COLUMN_2 10
genio43 KEYB_COLUMN_3 11
genio53 KEYB_COLUMN_4 12
genio63 KEYB_COLUMN_5 13
genio72 KEYB_COLUMN_6 14
genio73 KEYB_COLUMN_7 15
KEYB_CMT(20:0)
genio49 CAM_HWA_LDO_EN 0
genio27 CAM_HWA_LDO_STB 1
genio64 GAMING_KEY1 2
genio67 GAMING_KEY2 3
genio20 FM_INT 5
genio44 LCD_RESET 6
genio52 POWER_SAVE_LED 7
genio57 GAMING_LED_EN 8
genio56 SLIDER_EL_EN 9
genio25 ANT_ST2 11
genio16 IHF_PA_EN 12
genio28 AIC33_RESETX 13
genio40 NAVISCROLL_INT 14
genio47 KEY_LOCK_SWITCH 15
genio62 SIDE_LEDS_EN 16
GEN_CTRL_CMT(20:0)



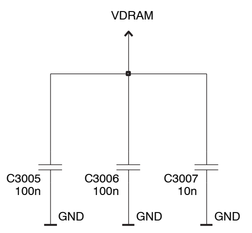
7
SlaveSWSet
USBPUEn
1
6
FTX
USBFSE0_FTX
7
5
OEX
USBOEX
3
4
FSE0
USBFSE0_FTX
7
3
VO
USBVO
2
2
RCV_FRX2
USBCV_FRX2
15
1
VP_FRX
USBVP_FRX
13
0
VM_CLK
USBVM_Clk
14
INTUSB(8:0)
USB_CMT(15:0)
ULPIClk
8
ULPIDir
9
ULPINxt
10
GND


COMBO
1G NAND / 512M DDR
SDRAM_AD(15:0)
SDRAM_CTRL(15:0)
SDRAM_DA(31:0)
SDRAM_BA(1:0)
MEMCONT(15:0)
MEMADDA(24:0)
SDRAM_AD(15:0)
SDRAM_CTRL(15:0)
SDRAM_DA(31:0)
SDRAM_BA(1:0)
MEMCONT(15:0)
MEMADDA(24:0)
3000-3099

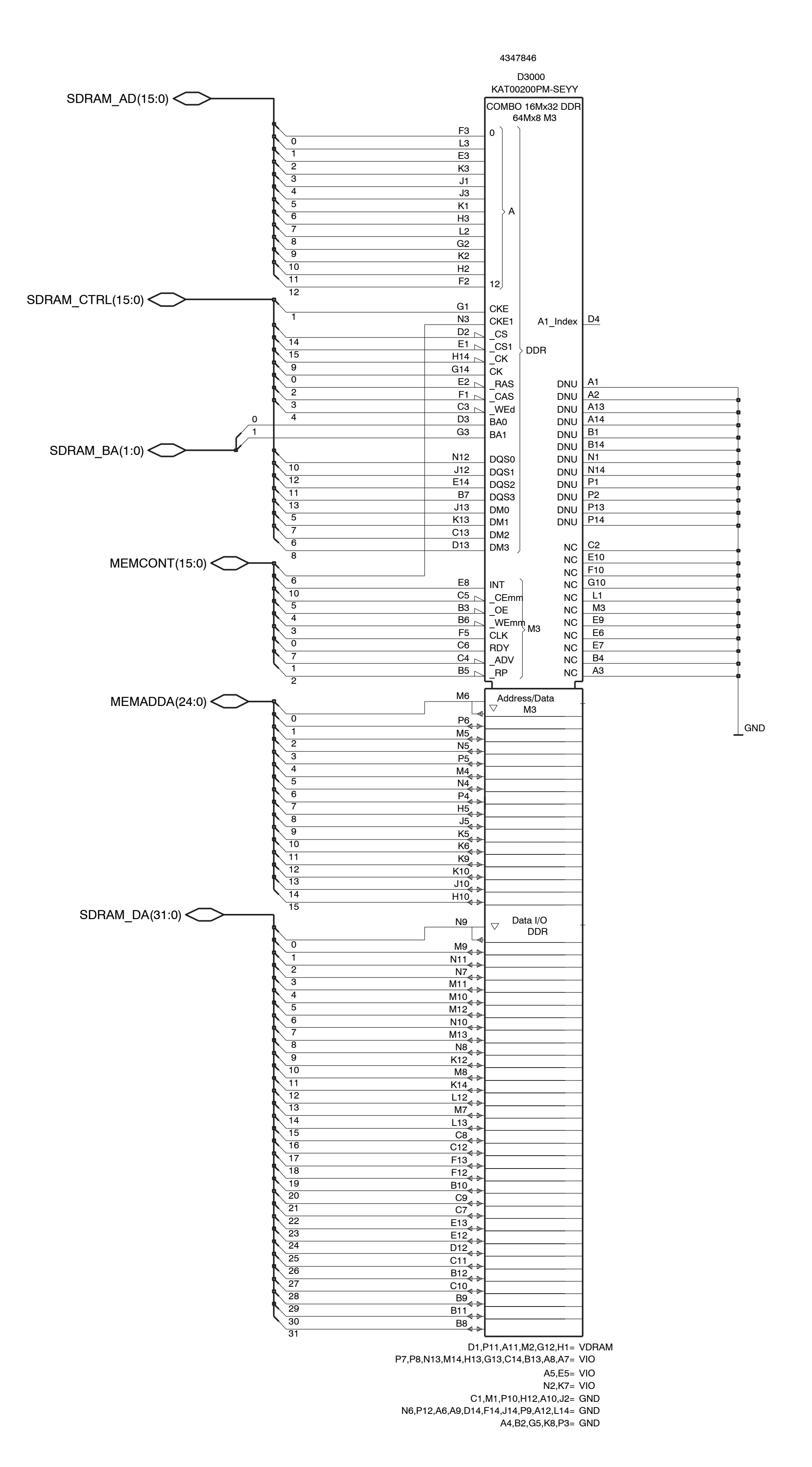

Mass_Memory
PUSL(7:0)
MMC(14:0)
PUSL(7:0)
MMC(14:0)
3200-3299



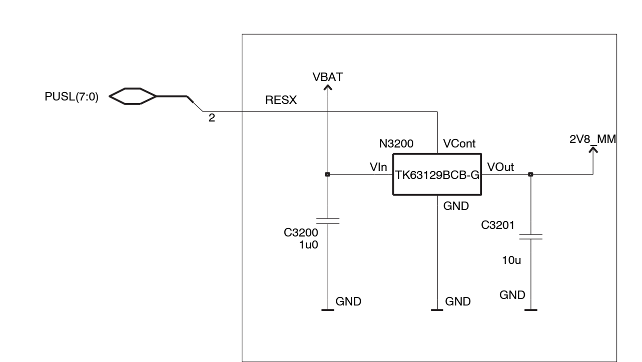
VIO
C3000
100n
C3001
100n
C3002
100n
C3003
10n
C3004
100n
GND



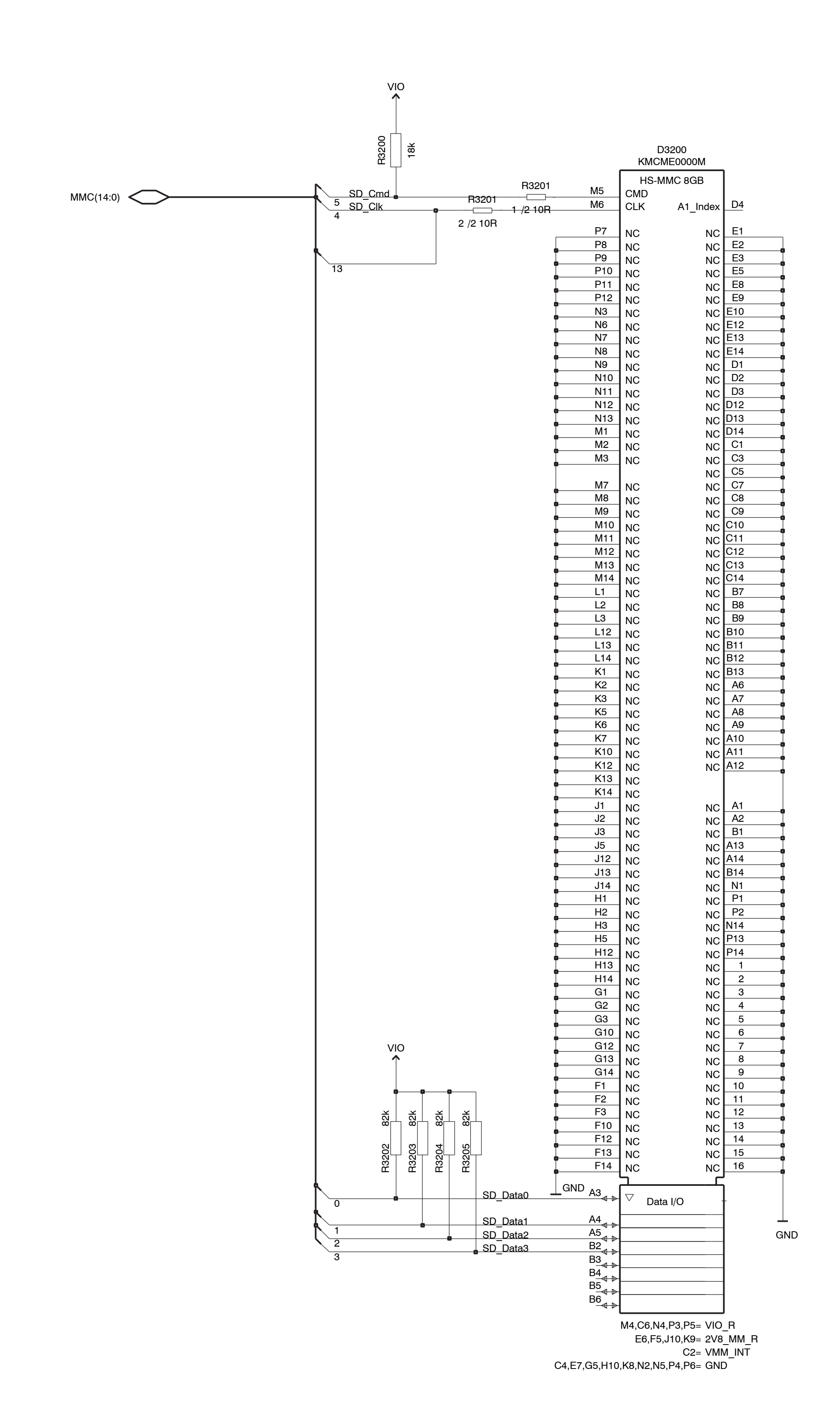
VDRAM
C3005
100n
C3006
100n
C3007
10n
GND



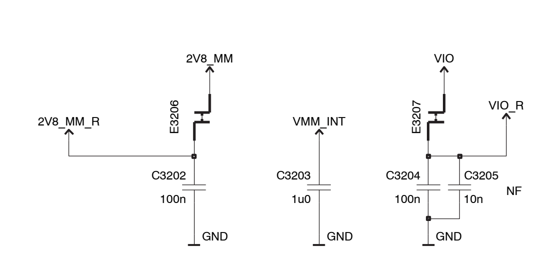
4347846
D3000
KAT00200PM-SEYY
COMBO 16Mx32 DDR
64Mx8 M3
SDRAM_AD(15:0)
SDRAM_CTRL(15:0)
SDRAM_BA(1:0)
MEMCONT(15:0)
MEMADDA(24:0)
SDRAM_DA(31:0)
CKE
CKE1
_CS
_CS1
_CK
CK
_RAS
_CAS
_WEd
BA0
BA1
DQS0
DQS1
DQS2
DQS3
DM0
DM1
DM2
DM3
DDR
INT
_CEmm
_OE
_WEmm
CLK
RDY
_ADV
_RP
M3
A1_Index
DNU
NC
Address/Data
M3
Data I/O
DDR
GND
D1,P11,A11,M2,G12,H1= VDRAM
P7,P8,N13,M14,H13,G13,C14,B13,A8,A7= VIO
A5,E5= VIO
N2,K7= VIO
C1,M1,P10,H12,A10,J2= GND
N6,P12,A6,A9,D14,F14,J14,P9,A12,L14= GND
A4,B2,G5,K8,P3= GND



PUSL(7:0)
2
RESX
VBAT
N3200
VCont
VIn
TK63129BCB-G
VOut
2V8_MM
GND
C3200
1u0
C3201
10u
GND
GND
GND



VIO
R3200
18k
MMC(14:0)
5
SD_Cmd
SD_Clk
4
13
R3201
2 /2 10R
R3201
1 /2 10R
M5
M6
D3200
KMCME0000M
HS-MMC 8GB
CMD
CLK
A1_Index
D4
P7 P8 P9 P10 P11 P12 N3 N6 N7 N8 N9 N10 N11 N12 N13 M1 M2 M3
M7 M8 M9 M10 M11 M12 M13 M14 L1 L2 L3 L12 L13 L14 K1 K2 K3 K5 K6 K7 K10 K12 K13 K14 J1 J2 J3 J5 J12 J13 J14 H1 H2 H3 H5 H12 H13 H14 G1 G2 G3 G10 G12 G13 G14 F1 F2 F3 F10 F12 F13 F14
NC
E1 E2 E3 E5 E8 E9 E10 E12 E13 E14 D1 D2 D3 D12 D13 D14 C1 C3 C5 C7 C8 C9 C10 C11 C12 C13 C14 B7 B8 B9 B10 B11 B12 B13 A6 A7 A8 A9 A10 A11 A12
A1 A2 B1 A13 A14 B14 N1 P1 P2 N14 P13 P14 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
GND
VIO
82k
R3202
R3203
R3204
R3205
0
1
2
3
SD_Data0
SD_Data1
SD_Data2
SD_Data3
A3
A4
A5
B2
B3
B4
B5
B6
Data I/O
GND
M4,C6,N4,P3,P5= VIO_R
E6,F5,J10,K9= 2V8_MM_R
C2= VMM_INT
C4,E7,G5,H10,K8,N2,N5,P4,P6= GND



2V8_MM
2V8_MM_R
E3206
C3202
100n
GND
VMM_INT
C3203
1u0
GND
VIO
VIO_R
E3207
C3204
100n
C3205
10n
NF
GND

CBB5X

TOP SHEET

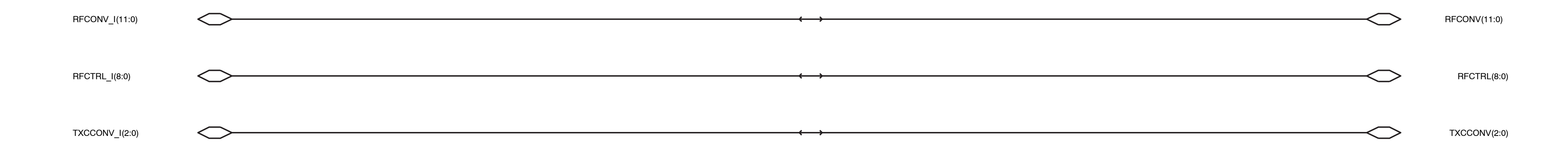
RFCLK_I(1:0)

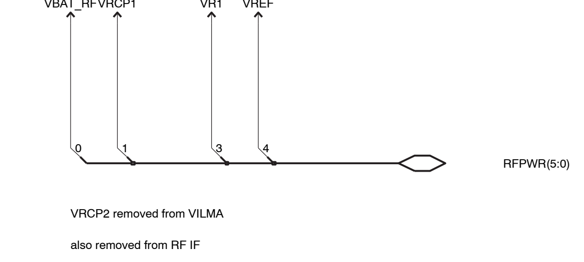
RFCLK(1:0)

Own CLK on Wlan-sheet

LPRFCLK_I

RFClkExt





AUDIO

AUDIO(8:0) — AUDIO(8:0)
XAUDIO(7:0) — XAUDIO(7:0)
DMIC(4:0) — DMIC(4:0)
GEN_CTRL_CMT(20:0) — GEN_CTRL_CMT(20:0)
FCI_CMT(3:0) — FCI_CMT(3:0)
I2S_CMT(7:0) — I2S_CMT(7:0)
PUSL(7:0) — PUSL(7:0)
AUDIOCTRL(5:0) — AUDIOCTRL(5:0)
USB_ACI(7:0) — USB_ACI(7:0)
H_BRIDGE(3:0) — H_BRIDGE(3:0)
FM_AUDIO(1:0) — FM_AUDIO(1:0)
ANT_FM — ANT_FM

2100-2199

ITU

PWRONX — PWRONX
KEYB_CMT(20:0) — KEYB_CMT(20:0)
GEN_CTRL_CMT(20:0) — GEN_CTRL_CMT(20:0)
FCI_CMT(3:0) — FCI_CMT(3:0)
BETTYIO(3:0) — BETTYIO(3:0)

2400-2499

CAMERA

I2C(1:0) — I2C(1:0)
CCP_CMT(3:0) — CCP_CMT(3:0)
CAM_CTRL_CMT(4:0) — CAM_CTRL_CMT(4:0)
GEN_CTRL_CMT(20:0) — GEN_CTRL_CMT(20:0)
CAM_CTRL(4:0) — CAM_CTRL(4:0)
CAM_CCP(7:0) — CAM_CCP(7:0)

2500-2599

CONN

CHARGER — CHARGER
USB_ACI(7:0) — USB_ACI(7:0)
SLOWAD(6:0) — SLOWAD(6:0)

2000-2099

SIM

SIM(6:0) — SIMIF(6:0)

2700-2799

LID

I2C(1:0) — I2C(1:0)
AUDIO(8:0) — AUDIO(8:0)
BETTYIO(3:0) — BETTYIO(3:0)
GEN_CTRL_CMT(20:0) — GEN_CTRL_CMT(20:0)
KEYB_CMT(20:0) — KEYB_CMT(20:0)
MESSI_CMT(25:0) — MESSI_CMT(25:0)
CAM_CTRL(4:0) — CAM_CTRL(4:0)
CAM_CCP(7:0) — CAM_CCP(7:0)

3800-3899

EMU_RAP

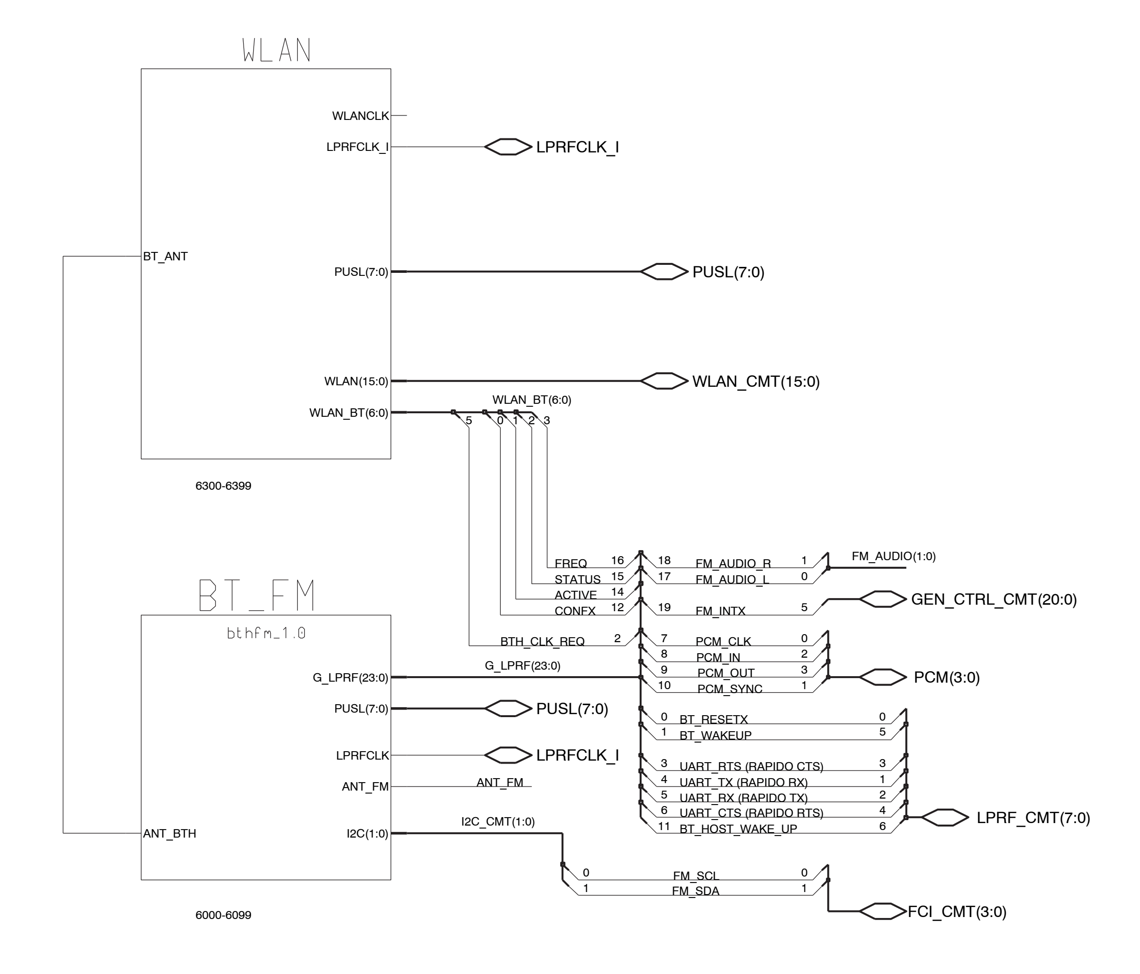
JTAG(6:0) — JTAG(6:0)
ETM(16:0) — ETM(16:0)
PUSL(7:0) — PUSL(7:0)

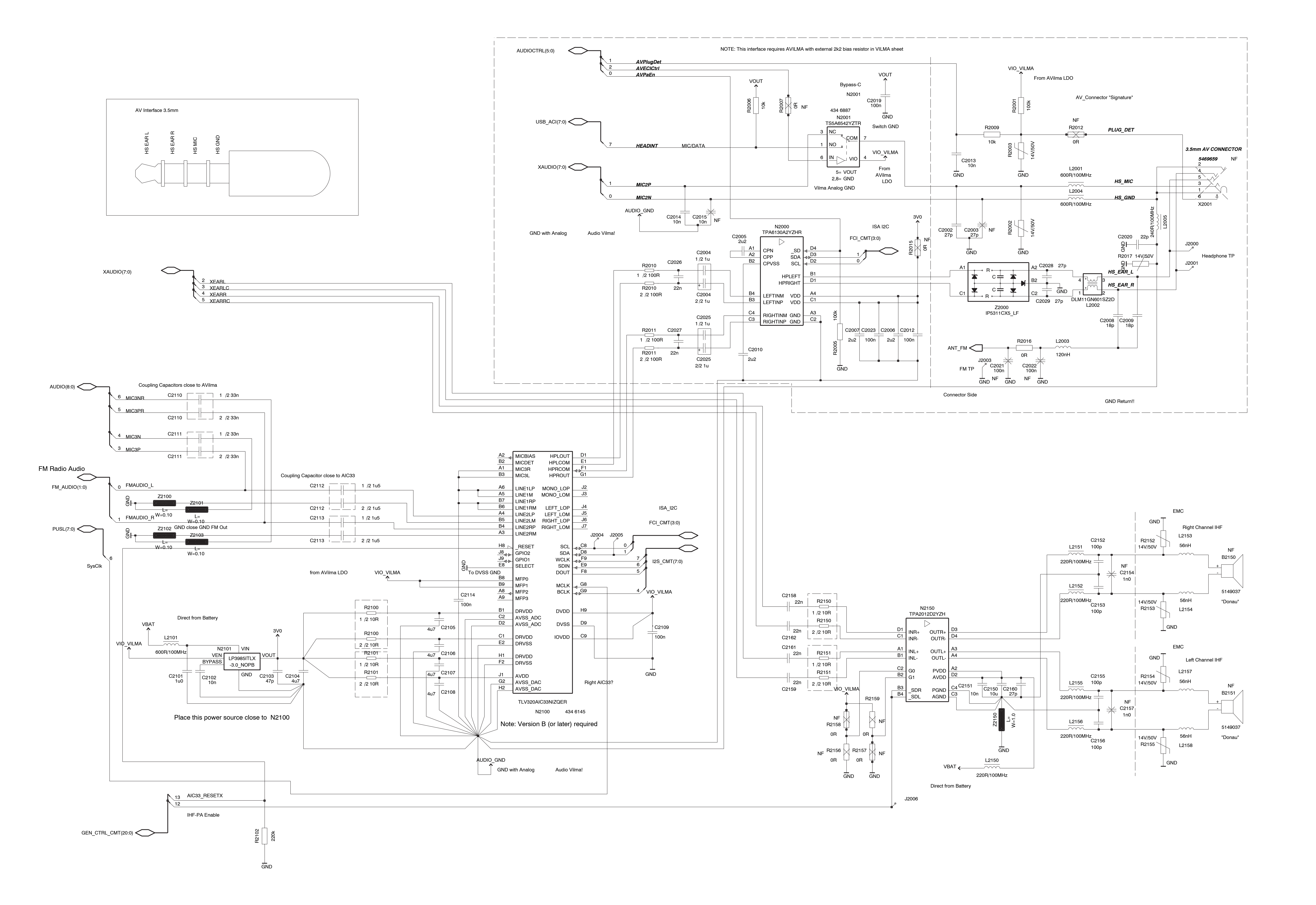
3100-3199

WING

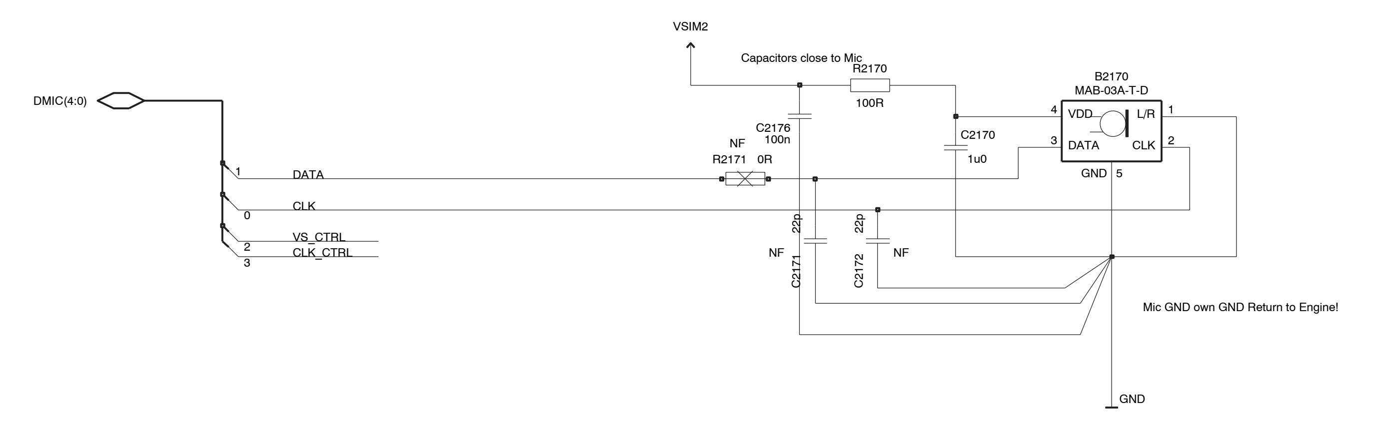
FCI_CMT(3:0) — FCI_CMT(3:0)
I2C(1:0) — I2C(1:0)
PUSL(7:0) — PUSL(7:0)
SLOWAD(6:0) — SLOWAD(6:0)
USB_ACI(7:0) — USB_ACI(7:0)
ETM(16:0) — ETM(16:0)
JTAG(6:0) — JTAG(6:0)
I2S_CMT(7:0) — I2S_CMT(7:0)

4000-4099

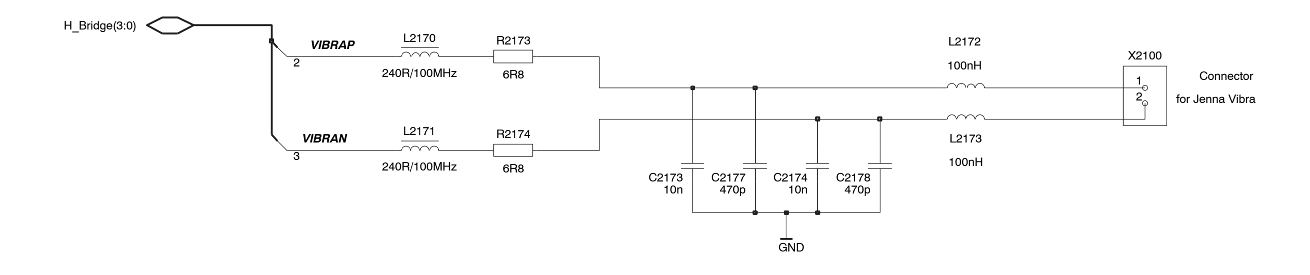




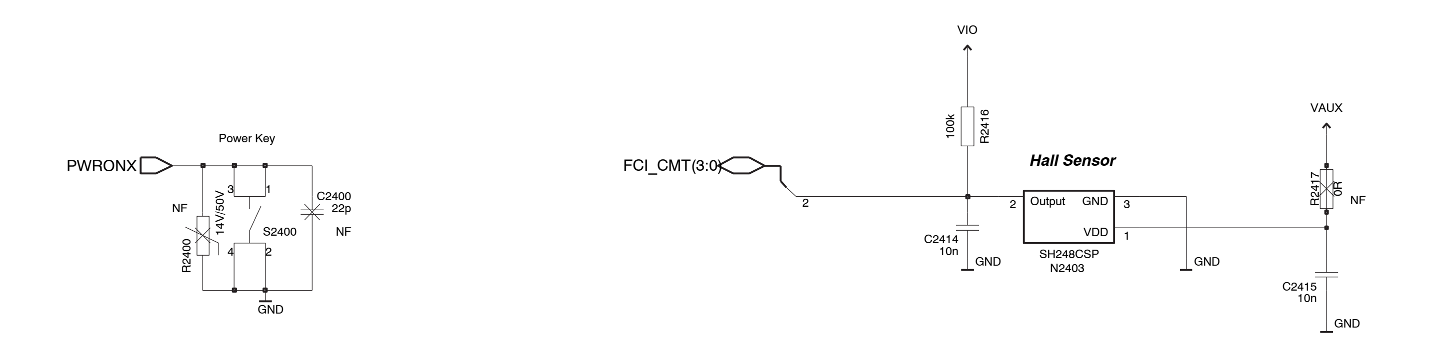
NOTE: This interface requires AVILMA with external 2k2 bias resistor in VILMA sheet
AV Interface 3.5mm
HS EAR L
HS EAR R
HS MIC
HS GND
AUDIOCTRL(5:0)
AVPlugDet
AVECICtrl
AVPaEn
USB_ACI(7:0)
HEADINT
MIC/DATA
XAUDIO(7:0)
MIC2P
MIC2N
AUDIO_GND
GND with Analog
Audio Vilma!
TS5A6542YZTR
Vilma Analog GND
From AVilma LDO
AV_Connector "Signature"
PLUG_DET
3.5mm AV CONNECTOR
HS_MIC
HS_GND
HS_EAR_L
HS_EAR_R
Headphone TP
TPA6130A2YZHR
ISA I2C
FCI_CMT(3:0)
IP5311CX5_LF
DLM11GN601SZ2D
ANT_FM
FM TP
Connector Side
GND Return!!
XEARL
XEARLC
XEARR
XEARRC
AUDIO(8:0)
Coupling Capacitors close to AVilma
MIC3NR
MIC3PR
MIC3N
MIC3P
FM Radio Audio
FM_AUDIO(1:0)
FMAUDIO_L
FMAUDIO_R
Coupling Capacitor close to AIC33
GND close GND FM Out
PUSL(7:0)
SysClk
from AVilma LDO
To DVSS GND
I2S_CMT(7:0)
Direct from Battery
LP3985ITLX -3.0_NOPB
Place this power source close to N2100
TLV320AIC33NIZQER
N2100 434 6145
Note: Version B (or later) required
Right AIC33?
TPA2012D2YZH
EMC
Right Channel IHF
Left Channel IHF
5149037 "Donau"
AIC33_RESETX
IHF-PA Enable
GEN_CTRL_CMT(20:0)
J2006

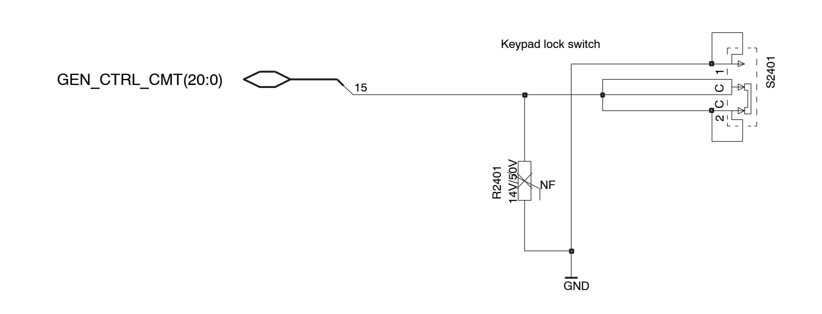


Shielded Lines for Mic!
VSIM2
Capacitors close to Mic
R2170
100R
B2170
MAB-03A-T-D
DMIC(4:0)
C2176
100n
C2170
1u0
VDD
L/R
DATA
CLK
GND
NF
R2171
0R
DATA
CLK
VS_CTRL
CLK_CTRL
22p
22p
NF
NF
C2171
C2172
Mic GND own GND Return to Engine!
GND



H_Bridge(3:0)
VIBRAP
VIBRAN
L2170
240R/100MHz
R2173
6R8
L2171
240R/100MHz
R2174
6R8
L2172
100nH
L2173
100nH
X2100
Connector
for Jenna Vibra
C2173
10n
C2177
470p
C2174
10n
C2178
470p
GND





KEYB_CMT(20:0)

Z2401
IP5040CX11_LF

J2400
J2401

COL_4
COL_5
COL_6
COL_7

ROW_4
ROW_5
ROW_6
ROW_7

X2400

S2415
C2410
27p
VOL-UP

S2416
C2411
27p
VOL-DOWN

S2417
C2412
27p
Shutter

R2404
33R
VOL LED
C2408
27p
V2405
R2402
5.6V/15V/0.05J
NF
Every EMC Component needs own GND via

R2405
33R
Shutter LED
C2409
27p
V2406
R2403
5.6V/15V/0.05J
NF
Every EMC Component needs own GND via

BETTYIO(3:0)
GEN_CTRL_CMT(20:0)

D2400
74AUC2G08YZTR
8= VIO
4= GND

D2400
74AUC2G08YZTR
8= VIO
4= GND

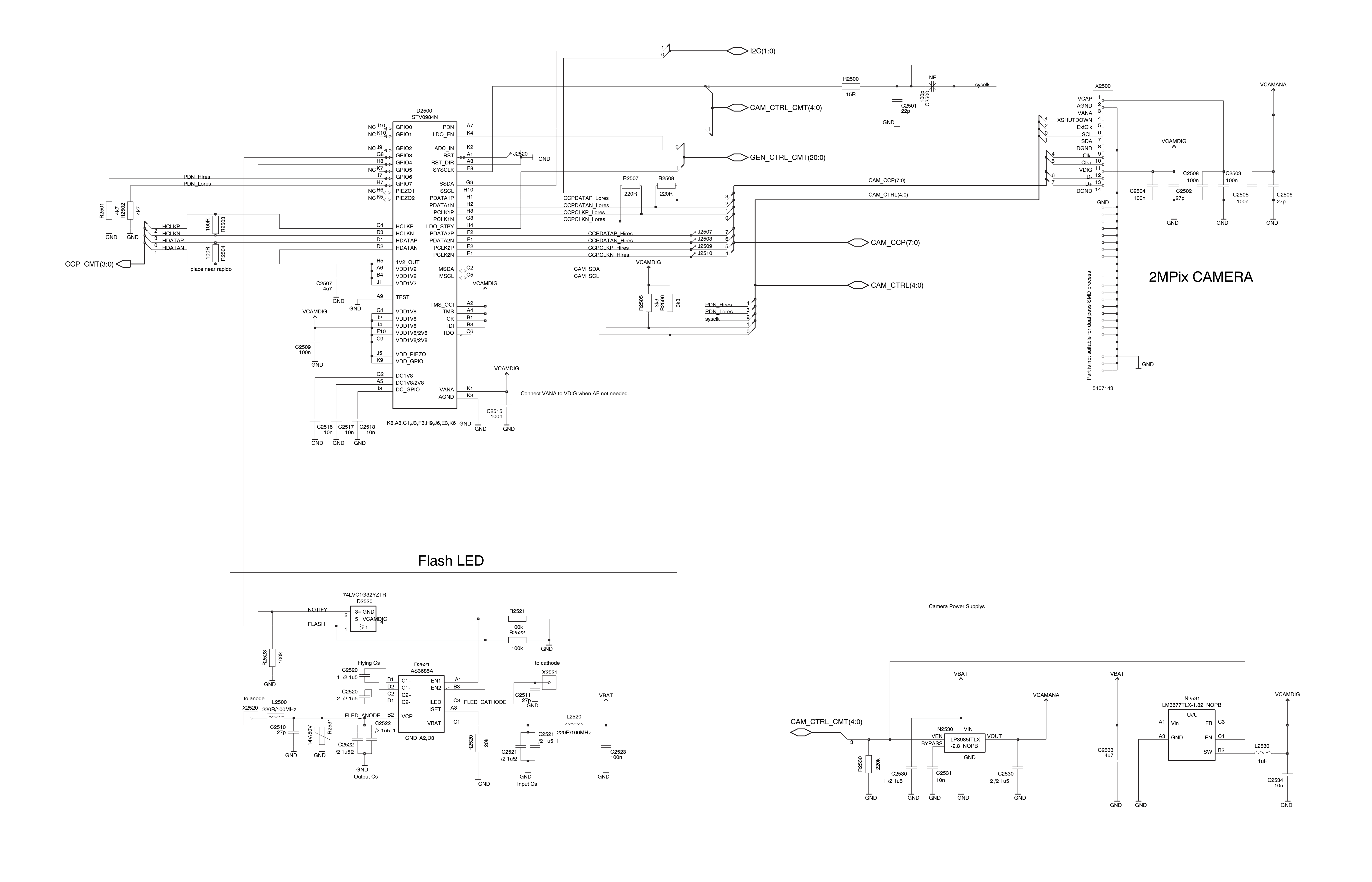
ITU_EL_EN
SIDE_LEDS_EN

VBAT
C2413
1u0
GND

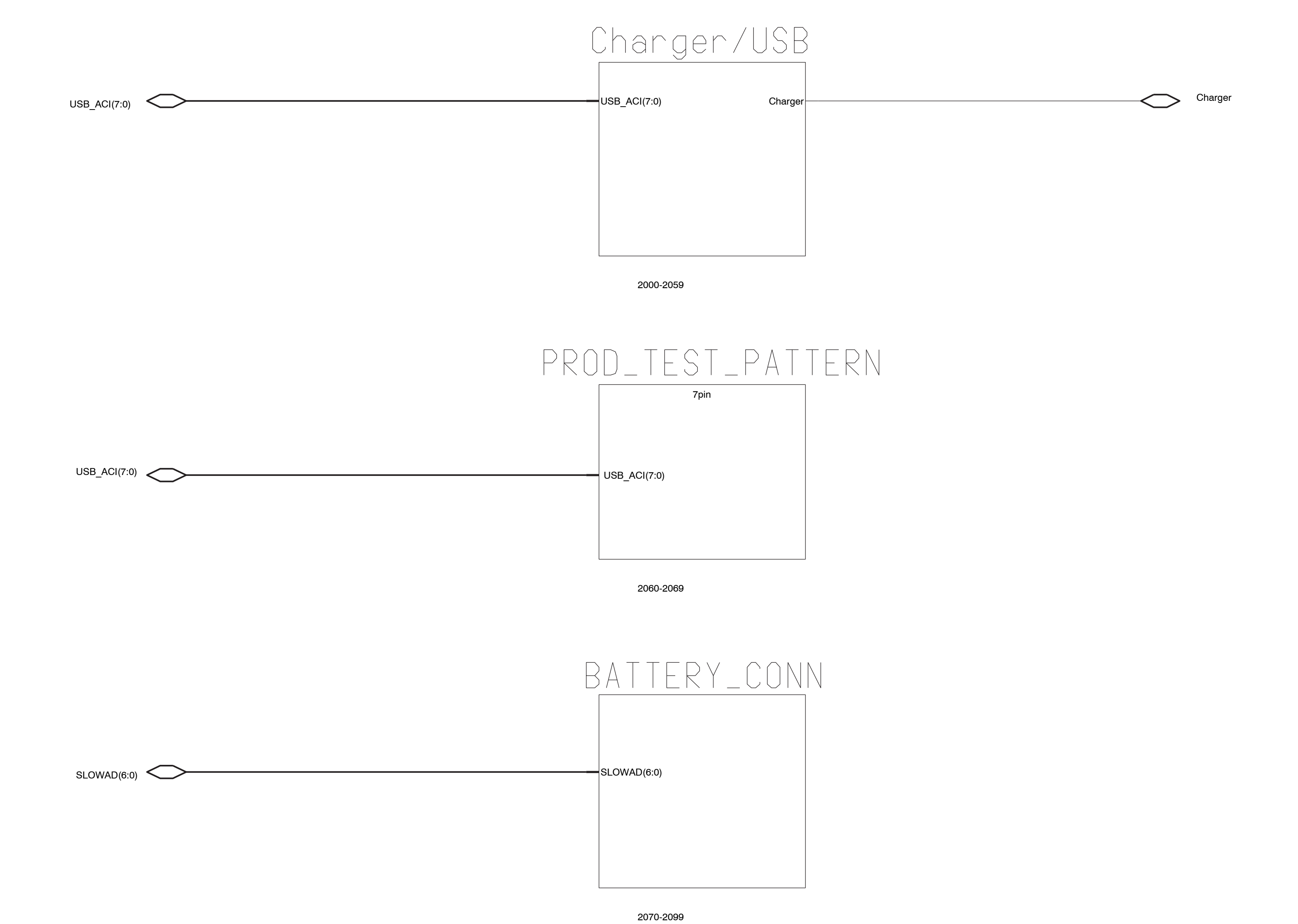
N2402
TPS75105YFFR
VIN
ENA
ENB
ISET
D1A
D2A
D1B
D2B
C2= GND

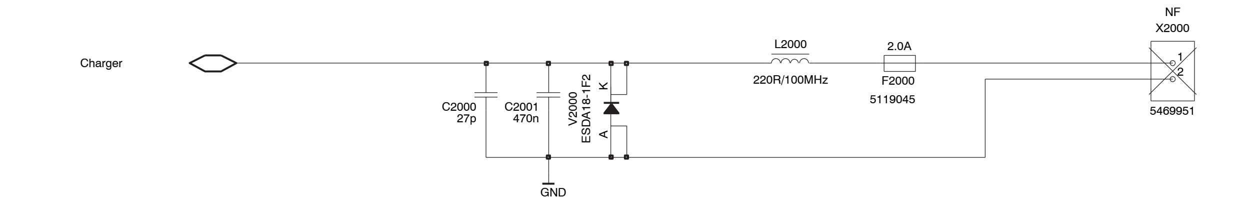
R2415
47k
GND
Iset apr. 10mA for each channel

VIO
C2416
10n
GND

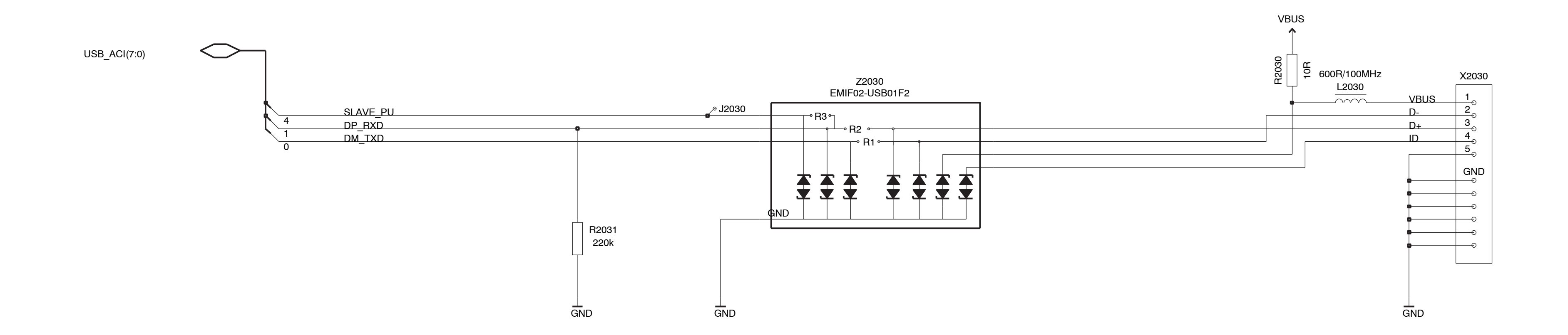


I2C(1:0)
CAM_CTRL_CMT(4:0)
GEN_CTRL_CMT(20:0)
CAM_CCP(7:0)
CAM_CTRL(4:0)
CCP_CMT(3:0)
D2500
STV0984N
GPIO0
GPIO1
GPIO2
GPIO3
GPIO4
GPIO5
GPIO6
GPIO7
PIEZO1
PIEZO2
HCLKP
HCLKN
HDATAP
HDATAN
1V2_OUT
VDD1V2
TEST
VDD1V8
VDD1V8/2V8
VDD_PIEZO
VDD_GPIO
DC1V8
DC1V8/2V8
DC_GPIO
PDN
LDO_EN
ADC_IN
RST
RST_DIR
SYSCLK
SSDA
SSCL
PDATA1P
PDATA1N
PCLK1P
PCLK1N
LDO_STBY
PDATA2P
PDATA2N
PCLK2P
PCLK2N
MSDA
MSCL
TMS_OCI
TMS
TCK
TDI
TDO
VANA
AGND
K8,A8,C1,J3,F3,H9,J6,E3,K6=GND
PDN_Hires
PDN_Lores
place near rapido
Connect VANA to VDIG when AF not needed.
R2500
15R
C2501
22p
NF
sysclk
CCPDATAP_Lores
CCPDATAN_Lores
CCPCLKP_Lores
CCPCLKN_Lores
CCPDATAP_Hires
CCPDATAN_Hires
CCPCLKP_Hires
CCPCLKN_Hires
CAM_SDA
CAM_SCL
X2500
VCAP
AGND
VANA
XSHUTDOWN
ExtClk
SCL
SDA
DGND
Clk-
Clk+
VDIG
D-
D+
VCAMANA
VCAMDIG
VBAT
GND
2MPix CAMERA
Part is not suitable for dual pass SMD process
5407143
Flash LED
74LVC1G32YZTR
D2520
NOTIFY
FLASH
3= GND
5= VCAMDIG
R2521
100k
R2522
100k
R2523
100k
Flying Cs
D2521
AS3685A
C1+
C1-
C2+
C2-
VCP
EN1
EN2
ILED
ISET
VBAT
FLED_CATHODE
FLED_ANODE
to cathode
X2521
to anode
X2520
L2500
220R/100MHz
L2520
220R/100MHz
14V/50V
Output Cs
Input Cs
Camera Power Supplys
CAM_CTRL_CMT(4:0)
N2530
LP3985ITLX
-2.8_NOPB
VIN
VEN
BYPASS
VOUT
N2531
LM3677TLX-1.82_NOPB
U//U
Vin
FB
EN
SW
L2530
1uH
C2534
10u
C2533
4u7

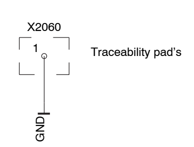

Charger/USB
USB_ACI(7:0)
USB_ACI(7:0)
Charger
Charger
2000-2059
PROD_TEST_PATTERN
7pin
USB_ACI(7:0)
USB_ACI(7:0)
2060-2069
BATTERY_CONN
SLOWAD(6:0)
SLOWAD(6:0)
2070-2099



Charger
C2000
27p
C2001
470n
V2000
ESDA18-1F2
K
A
GND
L2000
220R/100MHz
2.0A
F2000
5119045
NF
X2000
1
2
5469951

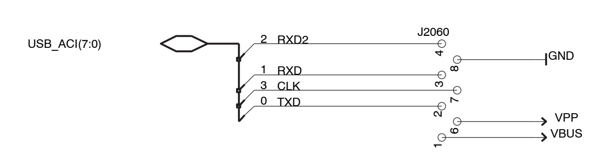


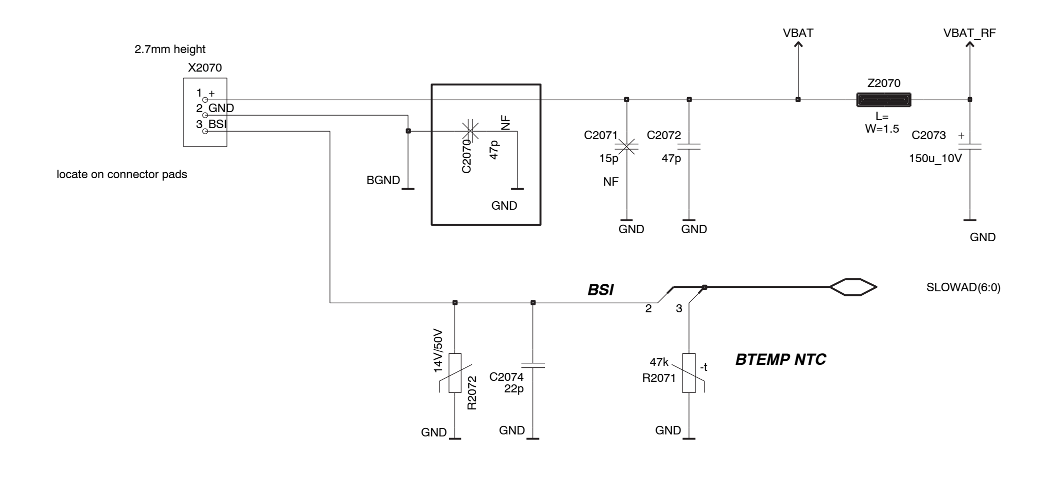
USB_ACI(7:0)
4
1
0
SLAVE_PU
DP_RXD
DM_TXD
J2030
Z2030
EMIF02-USB01F2
R3
R2
R1
GND
R2031
220k
GND
GND
VBUS
R2030
10R
600R/100MHz
L2030
X2030
1
2
3
4
5
VBUS
D-
D+
ID
GND
GND

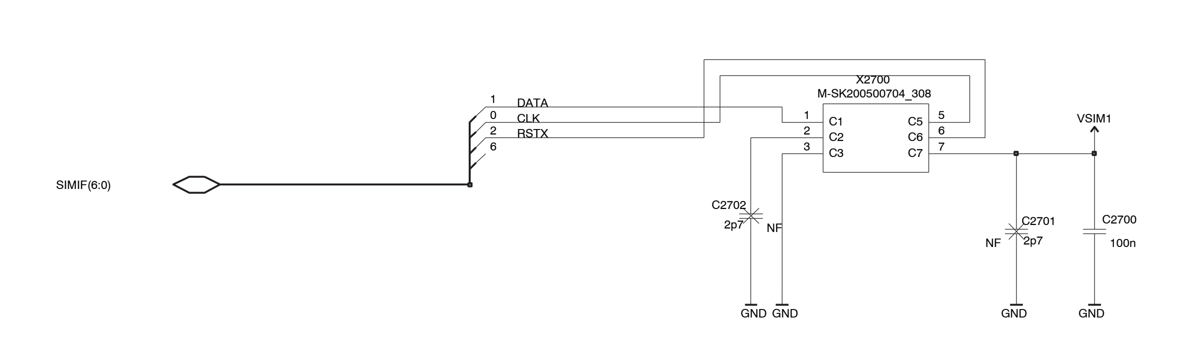


Traceability pad's

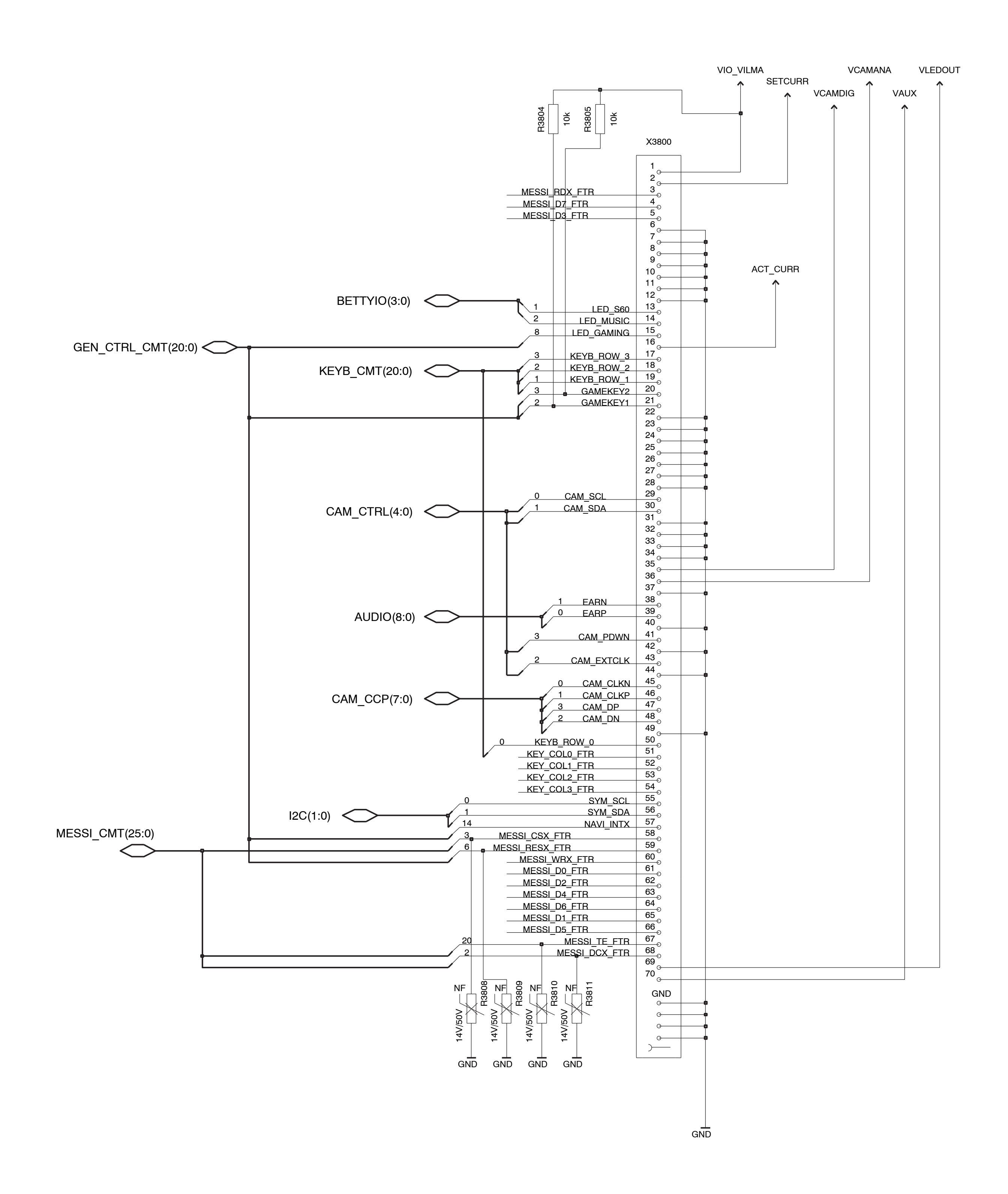
USB_ACI(7:0)

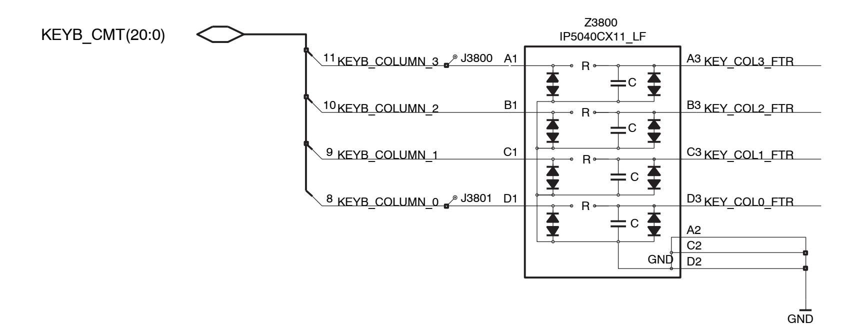


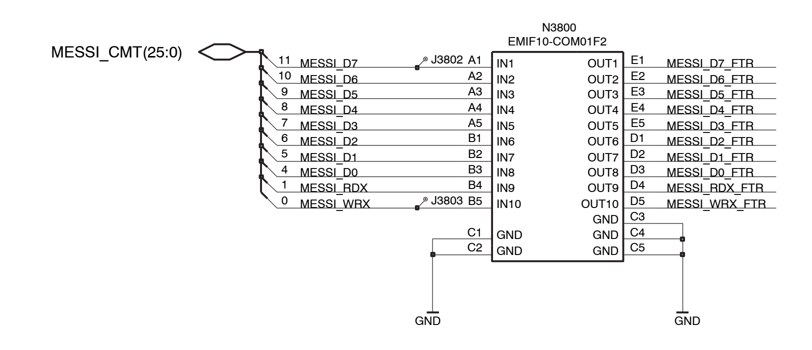

2.7mm height
X2070
1 +
2 GND
3 BSI
locate on connector pads
BGND
C2070
47p
NF
GND
VBAT
VBAT_RF
Z2070
L=
W=1.5
C2071
15p
NF
C2072
47p
GND
GND
C2073
150u_10V
GND
BSI
2
3
SLOWAD(6:0)
14V/50V
R2072
C2074
22p
GND
GND
47k
R2071
-t
BTEMP NTC
GND



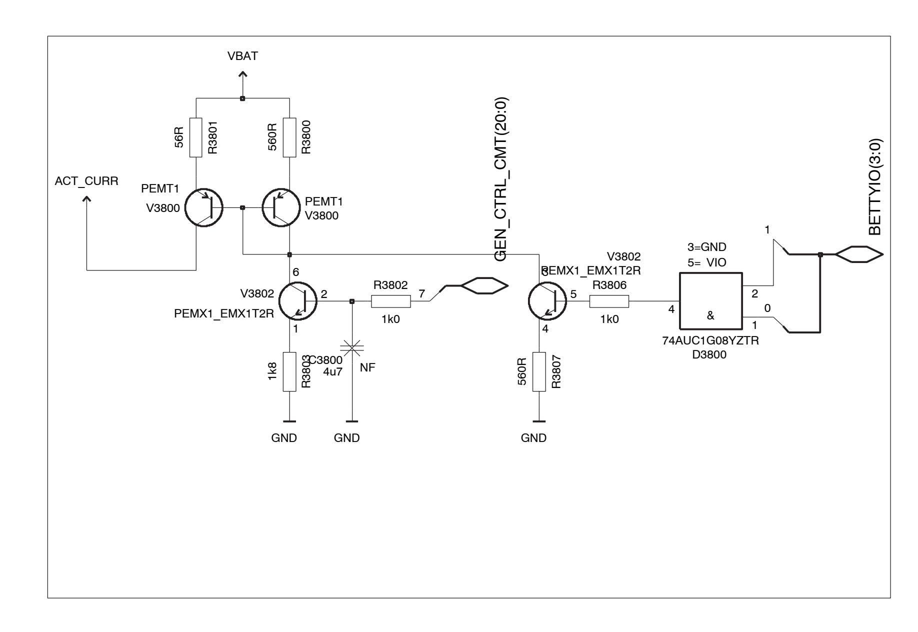
SIMIF(6:0)
1
0
2
6
DATA
CLK
RSTX
X2700
M-SK200500704_308
1
2
3
C1
C2
C3
C5
C6
C7
5
6
7
VSIM1
C2702
2p7
NF
C2701
NF
2p7
C2700
100n
GND
GND
GND
GND

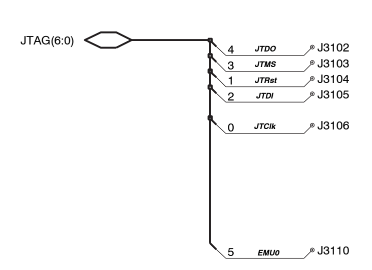


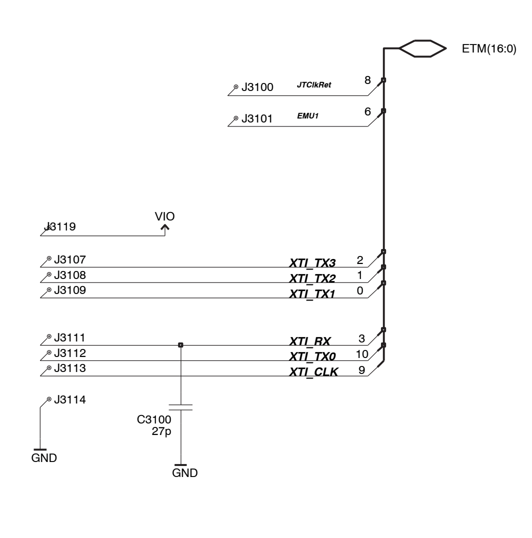


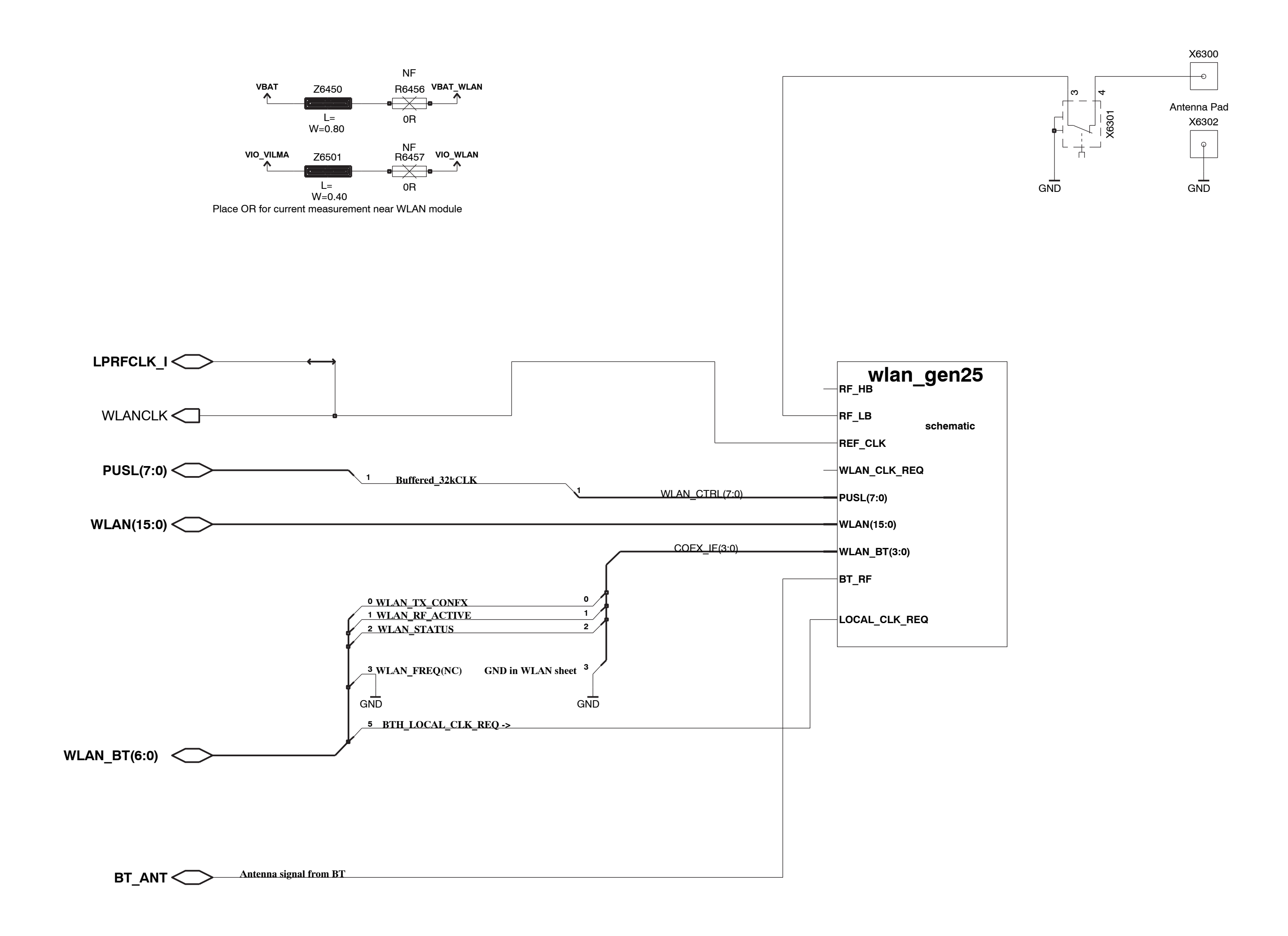


Activity LED Driver

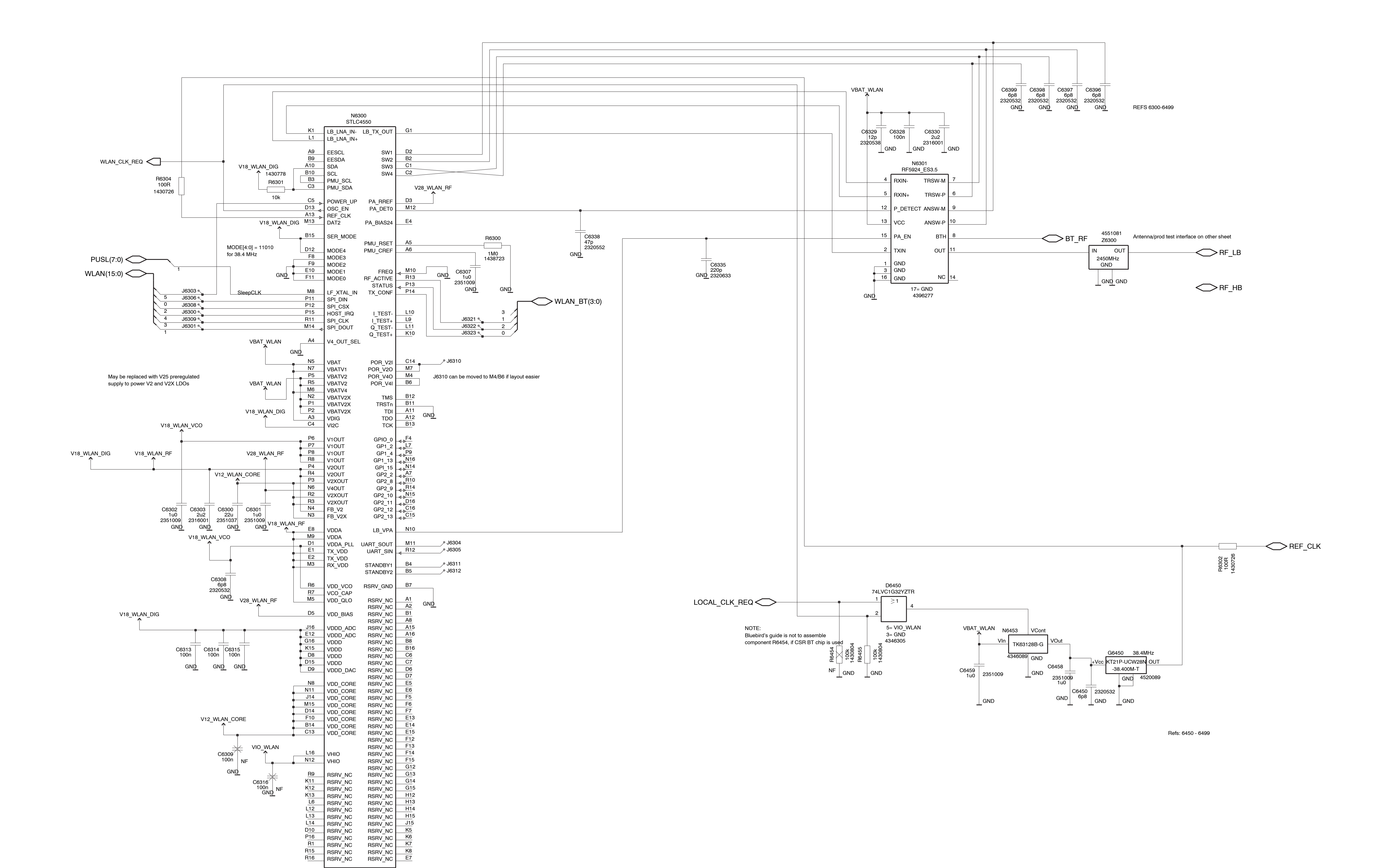



JTAG(6:0)
4 JTDO J3102
3 JTMS J3103
1 JTRst J3104
2 JTDI J3105
0 JTClk J3106
5 EMU0 J3110

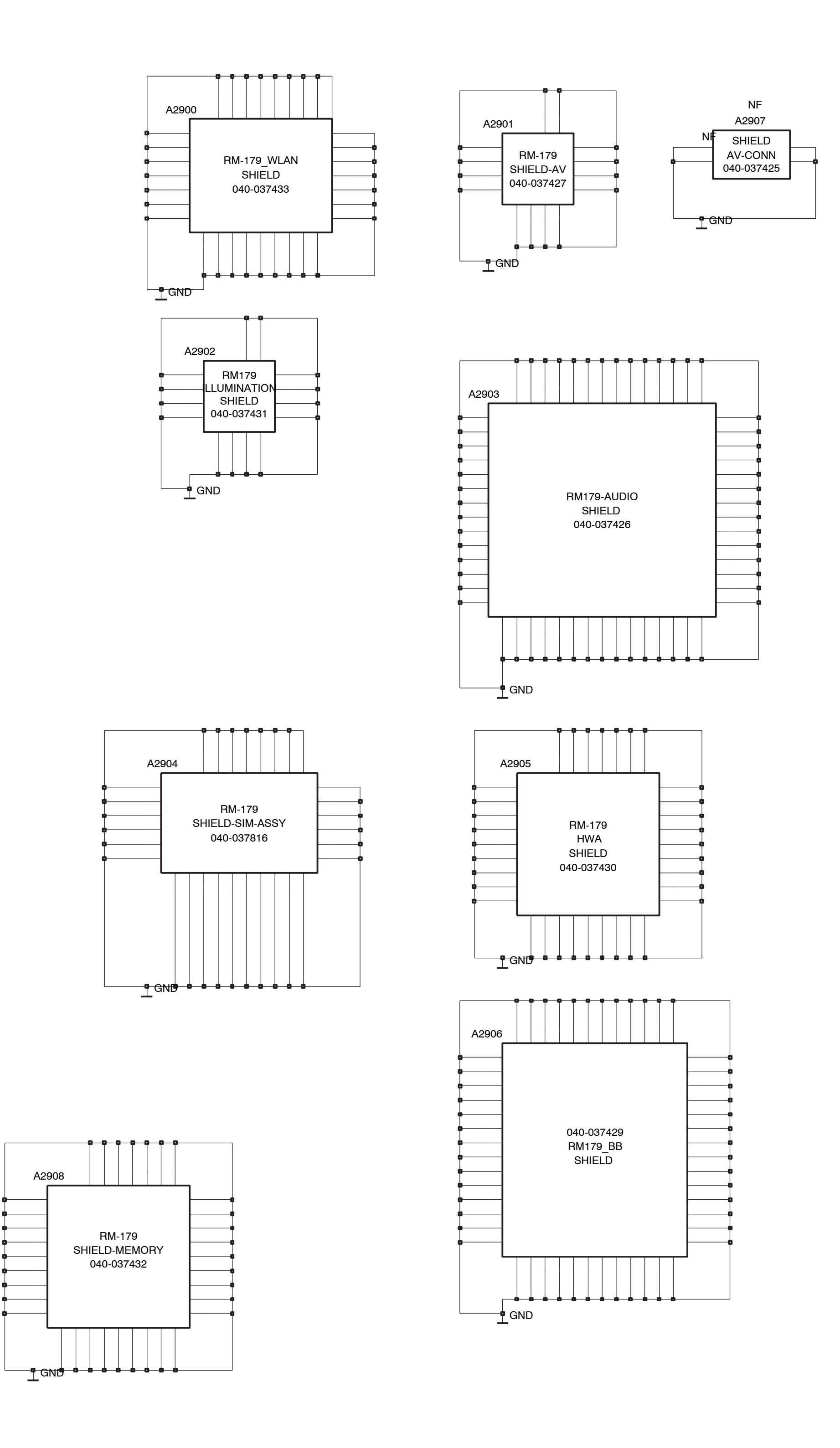

ETM(16:0)
J3100 JTClkRet 8
J3101 EMU1 6
J3119 VIO
J3107 XTI_TX3 2
J3108 XTI_TX2 1
J3109 XTI_TX1 0
J3111 XTI_RX 3
J3112 XTI_TX0 10
J3113 XTI_CLK 9
J3114
GND
C3100
27p
GND

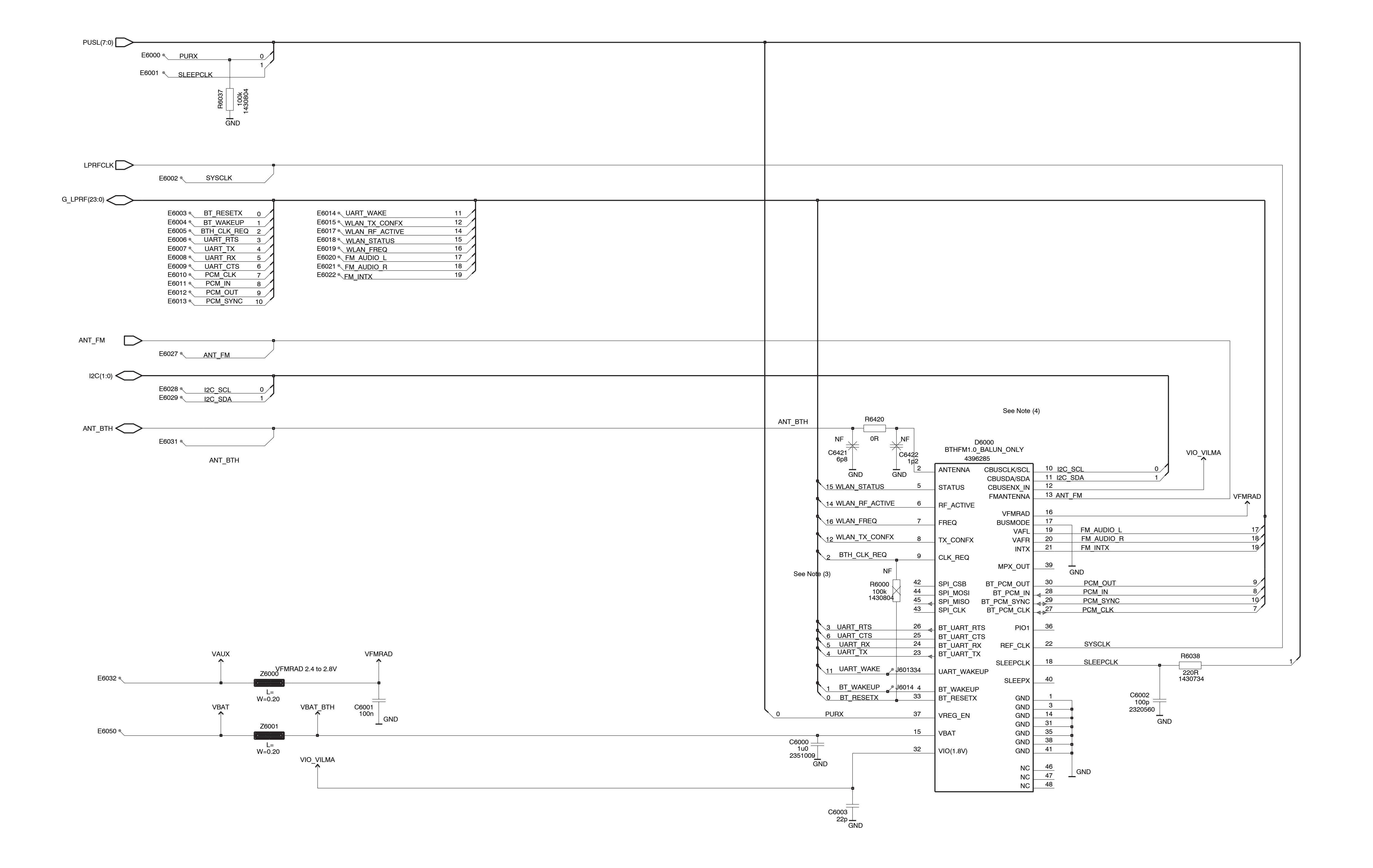


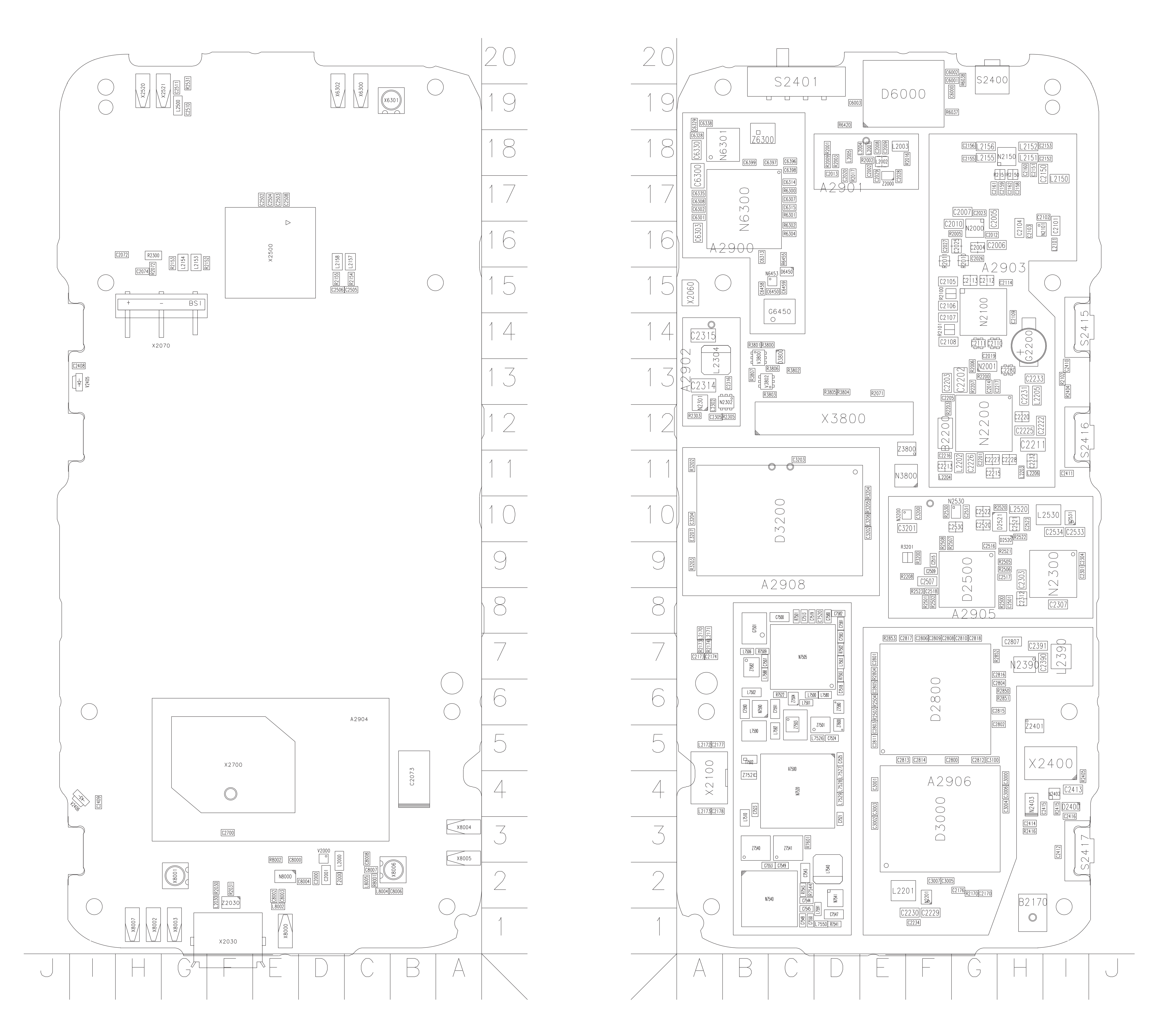
VBAT
Z6450
L=
W=0.80
NF
R6456
0R
VBAT_WLAN
VIO_VILMA
Z6501
L=
W=0.40
NF
R6457
0R
VIO_WLAN
Place OR for current measurement near WLAN module
X6300
Antenna Pad
X6302
X6301
GND
GND
LPRFCLK_I
WLANCLK
PUSL(7:0)
Buffered_32kCLK
WLAN_CTRL(7:0)
WLAN(15:0)
COEX_IF(3:0)
WLAN_TX_CONFX
WLAN_RF_ACTIVE
WLAN_STATUS
WLAN_FREQ(NC)
GND in WLAN sheet
GND
GND
BTH_LOCAL_CLK_REQ ->
WLAN_BT(6:0)
BT_ANT
Antenna signal from BT
wlan_gen25
schematic
RF_HB
RF_LB
REF_CLK
WLAN_CLK_REQ
PUSL(7:0)
WLAN(15:0)
WLAN_BT(3:0)
BT_RF
LOCAL_CLK_REQ



N6300
STLC4550
N6301
RF5924_ES3.5
REFS 6300-6499
Antenna/prod test interface on other sheet
MODE[4:0] = 11010
for 38.4 MHz
May be replaced with V25 preregulated
supply to power V2 and V2X LDOs
J6310 can be moved to M4/B6 if layout easier
WLAN_CLK_REQ
PUSL(7:0)
WLAN(15:0)
WLAN_BT(3:0)
BT_RF
RF_LB
RF_HB
REF_CLK
LOCAL_CLK_REQ
D6450
74LVC1G32YZTR
N6453
TK63128B-G
G6450
KT21P-UCW28N
-38.400M-T
38.4MHz
NOTE:
Bluebird's guide is not to assemble
component R6454, if CSR BT chip is used
GND PINS= GND
4396287
Refs: 6450 - 6499

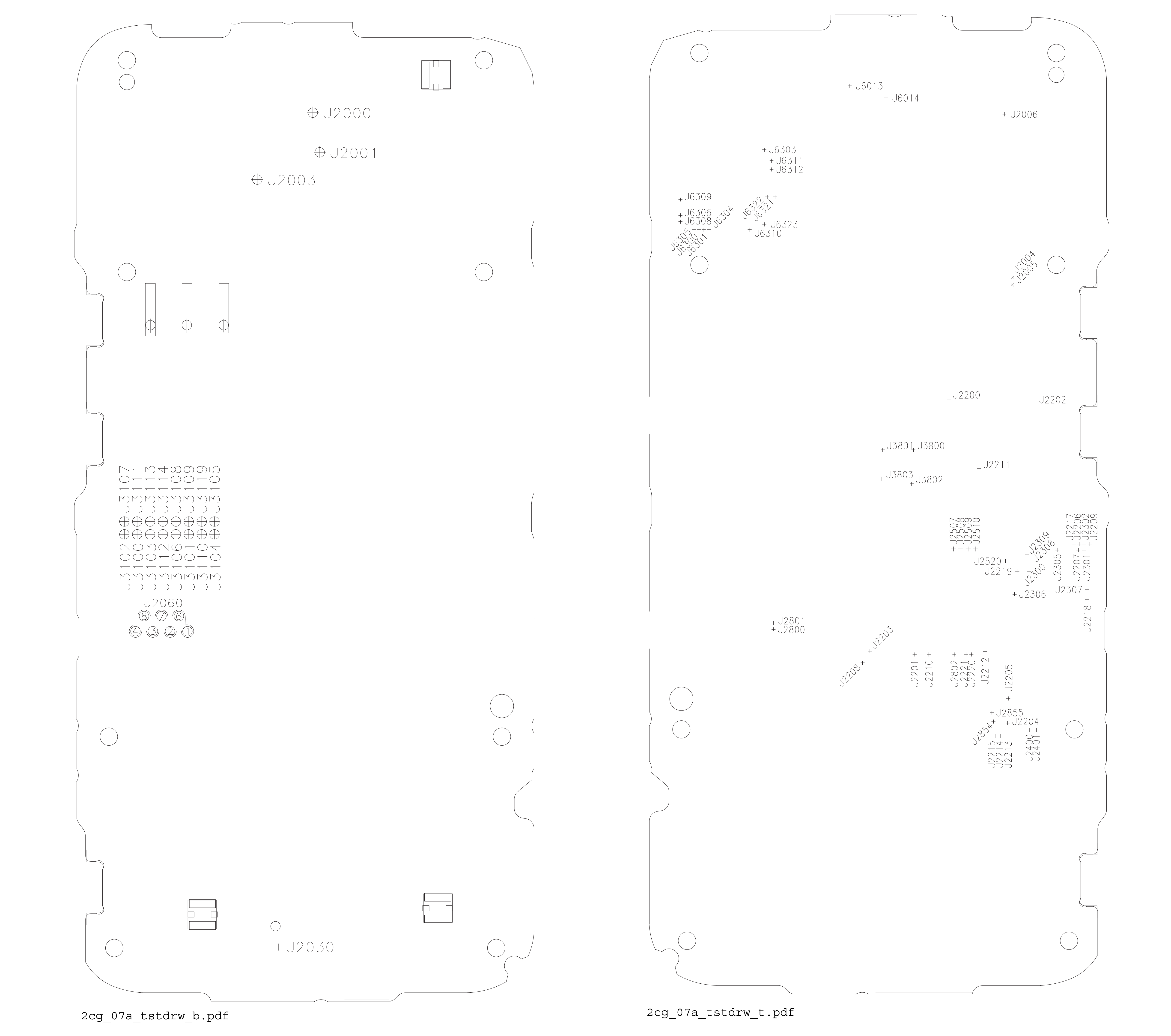

A2900
RM-179_WLAN
SHIELD
040-037433
GND
A2901
RM-179
SHIELD-AV
040-037427
GND
NF
A2907
SHIELD
AV-CONN
040-037425
GND
A2902
RM179
ILLUMINATION
SHIELD
040-037431
GND
A2903
RM179-AUDIO
SHIELD
040-037426
GND
A2904
RM-179
SHIELD-SIM-ASSY
040-037816
GND
A2905
RM-179
HWA
SHIELD
040-037430
GND
A2906
040-037429
RM179_BB
SHIELD
GND
A2908
RM-179
SHIELD-MEMORY
040-037432
GND


PUSL(7:0)
E6000 PURX 0
E6001 SLEEPCLK 1
R6037 100k 1430804
GND
LPRFCLK
E6002 SYSCLK
G_LPRF(23:0)
E6003 BT_RESETX 0
E6004 BT_WAKEUP 1
E6005 BTH_CLK_REQ 2
E6006 UART_RTS 3
E6007 UART_TX 4
E6008 UART_RX 5
E6009 UART_CTS 6
E6010 PCM_CLK 7
E6011 PCM_IN 8
E6012 PCM_OUT 9
E6013 PCM_SYNC 10
E6014 UART_WAKE 11
E6015 WLAN_TX_CONFX 12
E6017 WLAN_RF_ACTIVE 14
E6018 WLAN_STATUS 15
E6019 WLAN_FREQ 16
E6020 FM_AUDIO_L 17
E6021 FM_AUDIO_R 18
E6022 FM_INTX 19
ANT_FM
E6027 ANT_FM
I2C(1:0)
E6028 I2C_SCL 0
E6029 I2C_SDA 1
ANT_BTH
E6031
ANT_BTH
See Note (4)
R6420 0R
NF
C6421 6p8
C6422 1p2
D6000
BTHFM1.0_BALUN_ONLY
4396285
ANTENNA
STATUS
RF_ACTIVE
FREQ
TX_CONFX
CLK_REQ
SPI_CSB
SPI_MOSI
SPI_MISO
SPI_CLK
BT_UART_RTS
BT_UART_CTS
BT_UART_RX
BT_UART_TX
UART_WAKEUP
BT_WAKEUP
BT_RESETX
VREG_EN
VBAT
VIO(1.8V)
CBUSCLK/SCL
CBUSDA/SDA
CBUSENX_IN
FMANTENNA
VFMRAD
BUSMODE
VAFL
VAFR
INTX
MPX_OUT
BT_PCM_OUT
BT_PCM_IN
BT_PCM_SYNC
BT_PCM_CLK
PIO1
REF_CLK
SLEEPCLK
SLEEPX
GND
NC
VIO_VILMA
VFMRAD
See Note (3)
R6000 100k 1430804
J601334
J6014
R6038 220R 1430734
C6002 100p 2320560
C6000 1u0 2351009
C6003 22p
VAUX
Z6000
VFMRAD 2.4 to 2.8V
L= W=0.20
C6001 100n
E6032
VBAT
VBAT_BTH
Z6001
E6050
VIO_VILMA



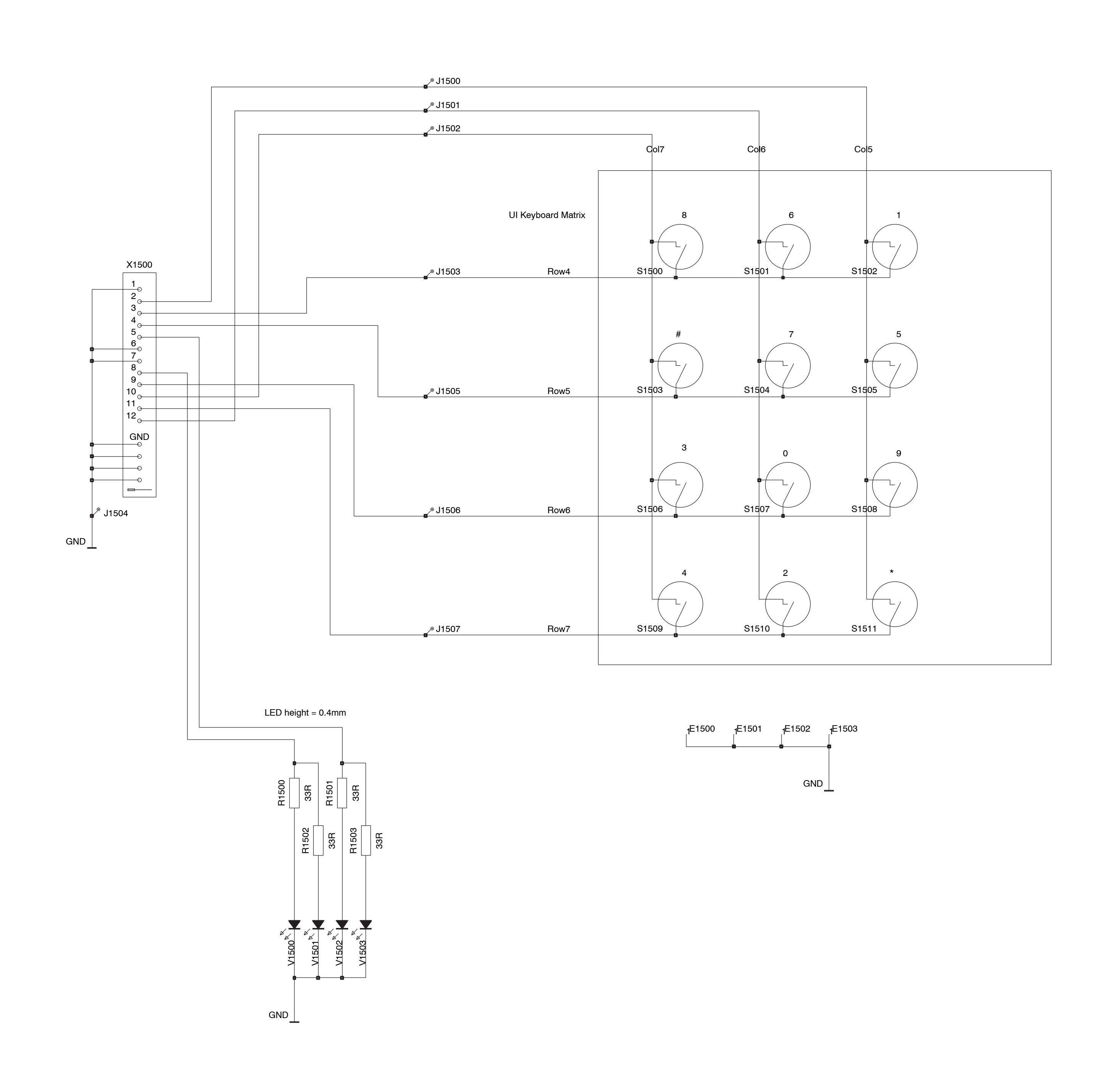
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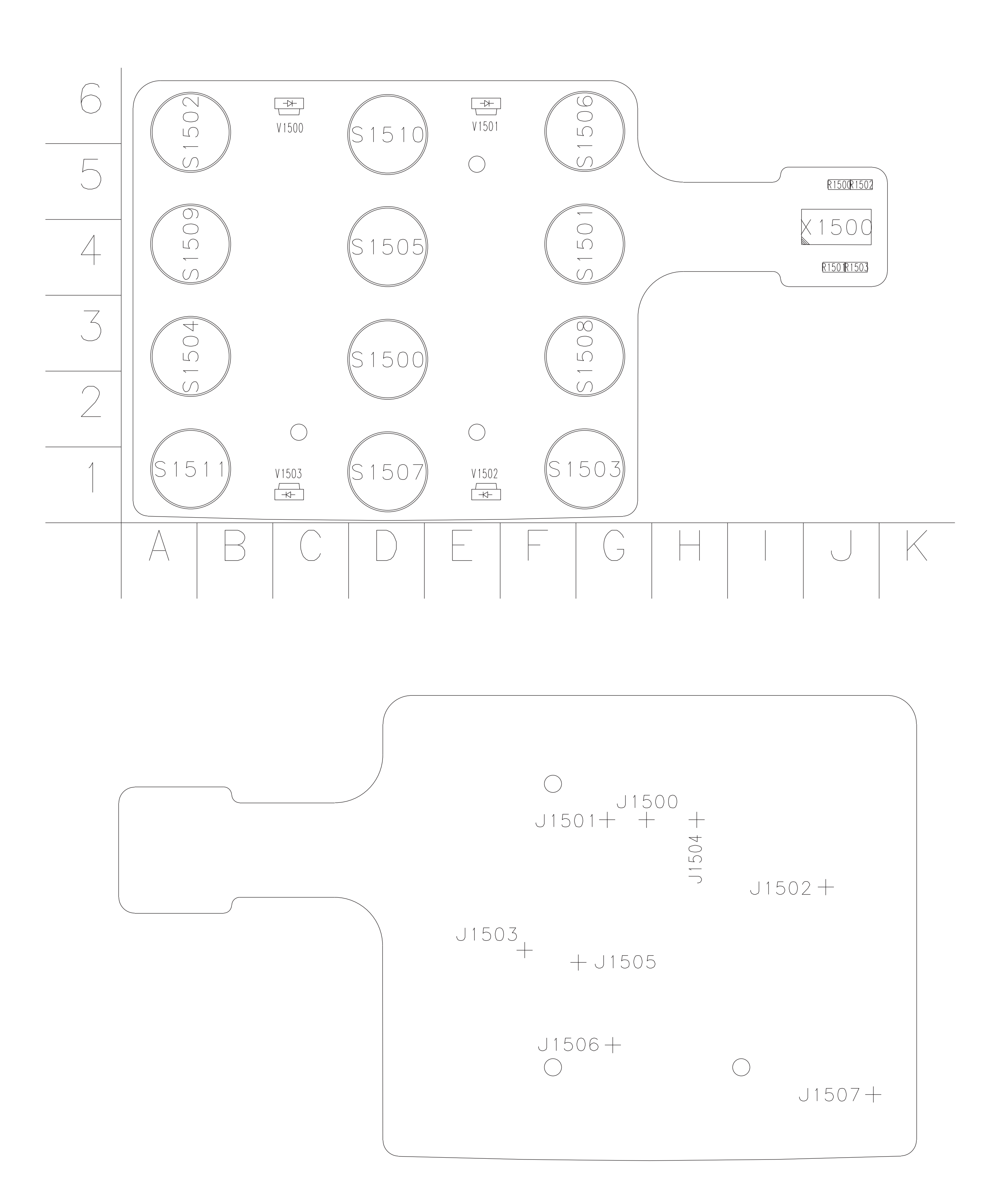
2cg_07a_asmdrw_t.pdf



2cg_07a_tstdrw_b.pdf

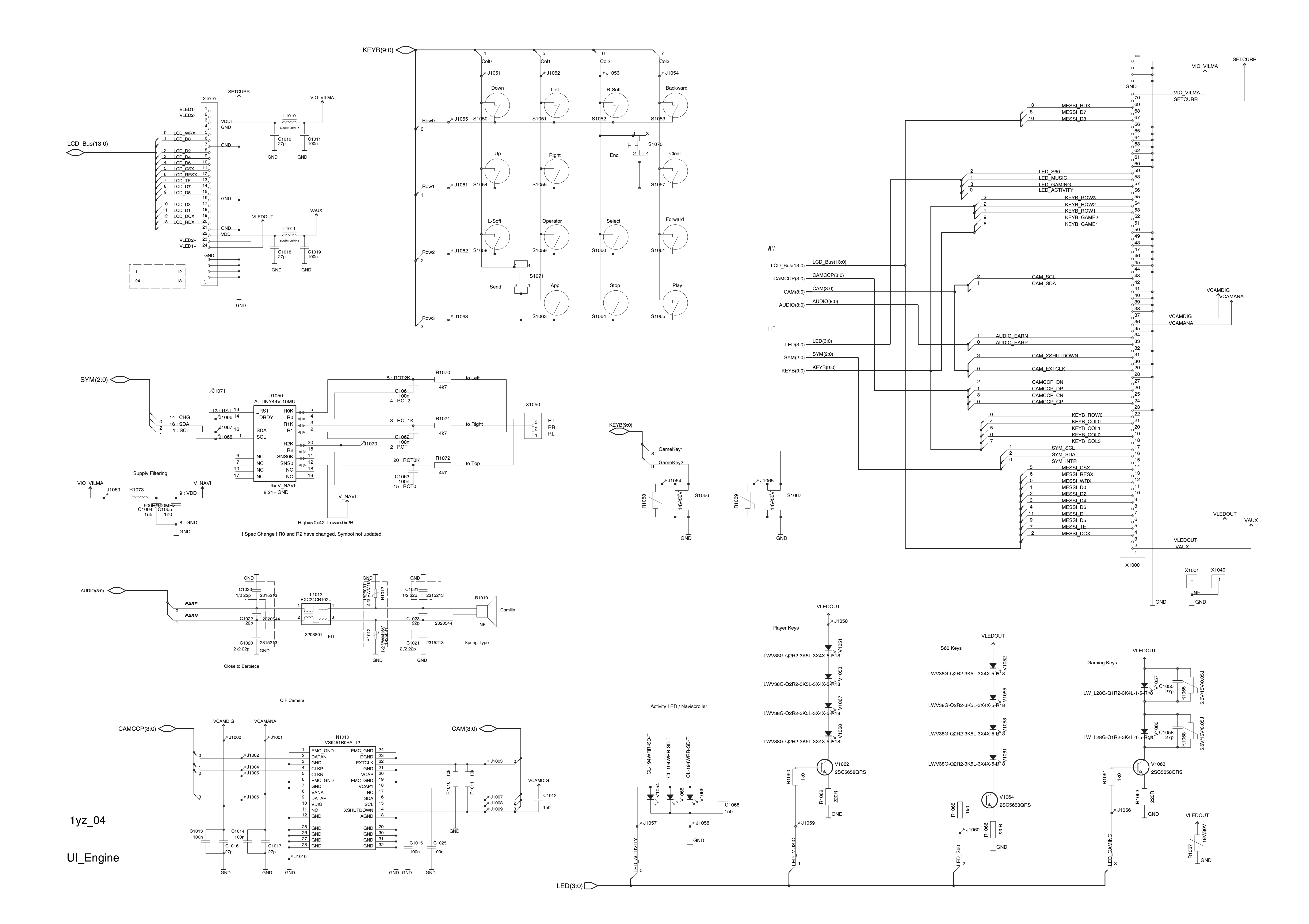
2cg_07a_tstdrw_t.pdf





1yk_04

ITU-keys



KEYB(9:0)
LCD_Bus(13:0)
SYM(2:0)
AUDIO(8:0)
CAMCCP(3:0)
CAM(3:0)
LED(3:0)
Supply Filtering
Close to Earpiece
CIF Camera
Activity LED / Naviscroller
Player Keys
S60 Keys
Gaming Keys
High=>0x42 Low=>0x2B
! Spec Change ! R0 and R2 have changed. Symbol not updated.
1yz_04
UI_Engine

1yz_04a_asmdrw_t.pdf

1yz_04a_asmdrw_b.pdf

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A B C D E F G H I J K L

L K J I H G F E D C B A